

## A REVISION OF THE AUSTRALIAN NOCTUIDAE.

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It would be difficult to over-estimate the debt which we owe to Sir George Hampson's great work, the Catalogue of the Lepidoptera Phalaenae. By it the study of the Noctuidae as a whole has been for the first time placed on a scientific basis, for previous attempts were only concerned with the fauna of restricted areas. It has been a task of enormous magnitude; already it has included some 8,500 species, and the large subfamilies of the Noctuinae and Hypeninae have not yet been included. The work must have been exceedingly difficult, for not only are the species so numerous, but they are also in the great majority very uniform in structure, so that generic and even subfamily distinctions are hard to find, and still more difficult to apply with consistency. While the general accuracy of Sir Geo. Hampson's work is freely acknowledged, there cannot fail to be some instances of errors of observation in a work of this magnitude, some of them the inevitable consequence of poor-ness of material. For instance, abdominal and thoracic crests are easily liable to denudation. There must also be instances in which differences of opinion as to the validity of characters regarded as generic by the author may lead to divergence of judgment.

My attempt at a revision of the Australian species is, of course, based on Hampson's work, which will always remain as an indispensable foundation for any study of this family; and I shall therefore assume that the student has it before him, and shall not consider it necessary to give references to it nor to repeat the synonymy, localities, etc., that may be found there. Where additional information is forthcoming it will be stated. Where I differ from him as to matters of fact or judgment, this will be indicated by the classification I have adopted, and where I think it advisable these differences will be discussed. In some respects my task has been comparatively easy, for I have only some 500 species to deal with, of most of which I have been able to examine sufficient material, and nearly all have been already diagnosed in Hampson's work. On the other hand, an opportunity of examining exotic material would no doubt have modified some of my conclusions. I shall deal with the subfamilies to the end of the

Acontianae, leaving the Catocalinae and Plusianae to be considered at a future date, in conjunction with the Noctuinae and Hypeninae.

The only subfamily not represented in Australia is the Mominae. Of those here dealt with I can give not only a census of the known species, but also a rough estimate of the percentage that they bear to the whole known fauna:—

|                  | No. | Per cent. |                | No. | Per cent. |
|------------------|-----|-----------|----------------|-----|-----------|
| Agaristinae ...  | 37  | 15.5      | Erastrinae ... | 120 | 10        |
| Agrotinae ...    | 48  | 4         | Eutelinae ...  | 9   | 5         |
| Melanchrinae ... | 45  | 4.5       | Stictopterinae | 9   | 8         |
| Cucullianae ...  | 7   | 1         | Sarothripinae  | 53  | 16        |
| Acronyctinae ... | 146 | 6         | Acontianae ... | 35  | 11        |

The total number of 509 species represents about 7 per cent. of the world fauna. The Agaristinae and Sarothripinae are very largely represented in Australia; the Erastrinae and Acontianae are well represented; the other groups only to a moderate or small extent. The groups which predominate in the Palaearctic regions, and in the temperate zone, are less developed here; while those of the Oriental region have spread across the tropics into the northern part of our continent in relatively large numbers.

The normal neuration of the forewings is as follows:—The second anal is weakly developed and sometimes (but by no means always) does not anastomose with the first anal owing to obsolescence, 2 arises from about  $\frac{2}{3}$ , 3, 4, and 5 from near lower angle of cell, 6 from upper angle or from slightly below, an areole is present from which 8, 9 are always stalked, 7 connate with them or closely approximated, rarely short-stalked, 10 separate, 11 from about middle of cell. In the hindwings 2 arises from about  $\frac{2}{3}$ , 3 and 4 are approximated or connate from lower angle of cell, 6, 7 connate from upper angle, 8 anastomoses with cell near base. In both wings the second branch of the cubital (usually known as 1 c.) is absent. In the hindwings vein 5 is in the Agaristinae, Agrotinae, Melanchrinae, Cucullianae, and Acronyctinae normally from the middle of the cell, and very weakly developed; in the other subfamilies it is from near the lower angle, and more or less strong.

In the forewing the slight variations in the origin of 6 and 7 do not appear of generic value. Rarely, as in *Aiteta*, 6 arises from the areole. The separation of 10 is more constant, and should it become connate with 8, 9 this may usually be depended on as a generic character; this is in fact the first step towards the obsolescence of the areole. In the forewing 3 and 4 are very rarely stalked, but this occurs less



rarely in the hindwing; 6 and 7 of the hindwing are rarely stalked; in some groups the anastomosis of 8 with the cell may occur as far as its middle.

Vein 5 of the hindwings is the second branch of the median, and in the pupal wing is supplied from the median trachea. During the maturation of the wing the median trachea disappears, and as a consequence vein 5 either atrophies in its original position, or is captured by a branch of the cubital trachea, and in its origin becomes deflected towards the lower angle of the cell. According to which alternative occurs we may primarily divide the Noctuidae into Trifinae and Quadrifinae, but the distinction is not absolute. In some Acronyctinae vein 5 arises from much below the middle, but is always weak, and in the Erastrianae many intermediate positions occur, together with a varying degree of development of the vein. It is in fact impossible to separate the subfamilies adopted by Hampson by absolute distinctions, or only by distinctions of relatively trivial importance, such as the spining of the tibiae, the hairiness of the eyes, the rough scaling of the forewings, etc.—characters which in other families occur in nearly related genera. I have, however, adopted Hampson's subfamilies, as they appear on the whole to represent natural groups, and no better classification presents itself; but I think they should be regarded rather as sections or tribes not sharply defined. Some of the generic characters admitted by Hampson are not in my judgment to be trusted, for instance the scaling of the thorax, and some of the finer distinctions in the shape of the frons and of the thoracic crests. I have endeavoured to apply all generic characters with consistency; fine distinction may be sometimes admissible, but they must be real, not imaginary. I must confess that I find some of Hampson's characters inappreciable, and I would rather retain large genera than break them up by characters which fail in practice.

The secondary sexual characters of the male are seldom of generic value in the Noctuidae, being often extraordinarily different in closely related species. I have therefore not considered it necessary to describe them, more especially as they have been given by Hampson with much fulness and accuracy. Species marked with a † I have not been able to examine.

#### Subfam. AGARISTINAE.

These are usually regarded as a distinct family, the Agaristidae. They are, however, simply day-flying Noctuidae, separable from that family by no structural character. Sir George Hampson indeed finds such a character in the

antennae, which are "more or less distinctly dilated towards extremity." Antennae so dilated, and hooked also at the apex, are certainly present in such genera as *Burgena*, *Comocrus*, *Phalaenoides*, *Agarista*, and others. But in *Cruria*, which is closely allied to these genera, and has the antennae similarly hooked, it needs an effort of the imagination to discover any dilatation. Again in *Argyrolepidia*, which Hampson includes in the Agaristidae, the antennae are no more dilated than in *Idalina*, which he excludes from the family. If Hampson's criterion were correct the species *tetrapleura*, which he makes a *Phalaenoides*, would have to be excluded also, for its antennae are filiform. The antennal differences, where real, are of no more than generic value, and to make them a basis of family distinction is an artificial device, which widely separates genera, which are naturally very closely allied. Hence it is that the Australian species are found in Hampson's work partly in the third and partly in the ninth volume.

I am unable even to define the group as a subfamily, although it is certainly a natural group, and should be treated as such. The alternative would drive us to place *Eutrichopidia*, with its hairy eyes, in the Melanchrinae, and *Cruria*, with its spiny tibiae, in the Agrotinae, which would be altogether unnatural.

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| 1. Abdomen stout, with dense lateral tufts of long hair from apical segments ... | 10. <i>Hecatesia</i>    |
| Abdomen normal, without long lateral tufts ...                                   | 2.                      |
| 2. Forewing with 8, 9, 10 stalked from areole                                    | 3.                      |
| Forewing with 10 arising separately from areole ...                              | 5.                      |
| 3. Posterior tibiae hairy on dorsum ...  | 2. <i>Comocrus</i>      |
| Posterior tibiae smooth-scaled ...   | 4.                      |
| 4. Posterior tibiae spiny ...  | 3. <i>Cruria</i>        |
| Posterior tibiae without spines ...  | 1. <i>Burgena</i>       |
| 5. Eyes hairy ...  | 4. <i>Eutrichopidia</i> |
| Eyes not hairy ...   | 6.                      |
| 6. Abdomen with dorsal crests on 3 or 4 segments ...                             | 7.                      |
| Abdomen not crested, or on first segment only ...                                | 8.                      |
| 7. Frons with truncate conical prominence with raised rim at apex ...            | 9. <i>Periopta</i>      |
| Frons with bluntly pointed conical prominence ...                                | 8. <i>Argyrolepidia</i> |
| 8. Frons with truncate conical prominence with raised rim at apex ...            | 9.                      |
| Frons not so formed ...  | 13.                     |
| 9. Posterior tibiae hairy on dorsum ...  | 10.                     |
| Posterior tibiae smooth ...  | 11.                     |

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|--|------------------------|
| 10. Palpi short (less than 2), terminal joint hairy ... ..     | 7. <i>Periscepta</i>   |
| Palpi moderately long (over 2), terminal joint smooth ... ..   | 5. <i>Phalaenoides</i> |
| 11. Abdomen with basal dorsal crest ... ..                     | 12. <i>Radinocera</i>  |
| Abdomen without basal crest ... ..                             | 12.                    |
| 12. Antennae thickened beyond middle and hooked at apex ... .. | 6. <i>Agarista</i>     |
| Antennae filiform and not hooked ... ..                        | 11. <i>Idalima</i>     |
| 13. Frons rounded and covered with long rough hairs ... ..     | 13. <i>Agaristodes</i> |
| Frons with long acute flattened corneous process ... ..        | 14.                    |
| 14. Eyes small, abdomen hairy ... ..                           | 14. <i>Apina</i>       |
| Eyes normal, abdomen smooth ... ..                             | 15. <i>Ipanica</i>     |

### 1. Gen. BURGENA, Wlk.

Antennae  $\frac{4}{5}$ , dilated beyond middle, slightly hooked at apex. Frons rounded, only slightly projecting. Palpi rather long, ascending; second joint densely rough-haired; terminal joint long, smooth. Abdomen smooth, not crested. Tibiae smooth. Forewings with 8, 9, 10 stalked from areole, 7 connate or short-stalked. Hindwings normal.

*varia*, Wlk.

### 2. Gen. COMOCRUS, Jord.

Antennae  $\frac{1}{2}$ , dilated beyond middle, hooked at apex. Frons with truncate conical prominence with raised rim at apex. Palpi rather long, ascending; second joint with long and dense rough hairs; terminal joint long, smooth. Abdomen not crested, clothed with dense, short, loose hairs. Tibiae with long rough hairs on dorsum. Forewings with 8, 9, 10 stalked from areole. Hindwings normal.

*behri*, Angas.

### 3. Gen. CRURIA, Jord.

Antennae  $\frac{1}{2}$  or less, not dilated, slightly hooked at apex. Frons with truncate conical prominence with raised rim at apex. Palpi rather long, ascending; second joint with long dense rough hairs; terminal joint rather long, smooth. Abdomen smooth, not crested. Tibiae smooth-scaled; posterior pair with spines on ventral surface. Forewings with 8, 9, 10 stalked from areole. Hindwings normal.

*donovani*, Bdv. *neptioides*, Butl. *darwiniensis*, Butl. *platyrantha*, Meyr. *synopla*, Turn.: Trans. Roy. Soc. S. Austr., 1903, p. 1. *epicharita*, Turn.: Ann. Q'land Mus., x., p. 59 (1911).

CRURIA STHENOZONA, n. sp. (*σθεροζωνος*, strongly girdled).

♂, ♀, 32-35 mm. Resembles *C. synopla*, but markings of forewings white without ochreous tinge; a slender line across thorax behind middle, extended into forewings beneath

cell to about middle; hindwings with very broad ochreous-whitish median fascia, nearly half breadth of wing, not dislocated at costal extremity towards tornus.

This is the northern representative of *synopla*, just as *darwinensis* is that of *donovani*.

*Hab.*—Northern Queensland: Atherton, in May; Evelyn Scrub, near Herberton, in October and January; three specimens.

#### 4. Gen. EUTRICHOPIDIA, Hmps.

Eyes hairy. Antennae about  $\frac{1}{2}$ ; very slightly dilated beyond middle; hooked at apex. Frons with truncate conical prominence with raised rim at apex. Palpi rather long, ascending; second joint with long dense rough hairs; terminal joint long, smooth. Abdomen slightly hairy, not crested. Posterior tibiae smooth. Neuration normal.

*latina*, Don.

#### 5. Gen. PHALAENOIDES, Lew.

Antennae about  $\frac{1}{2}$ ; slightly dilated beyond middle and hooked at apex. Frons with a truncate conical prominence with raised rim at apex. Palpi rather long, ascending; second joint with long dense rough hairs; terminal joint long, smooth. Abdomen moderately hairy. Posterior tibiae with long rough hairs on dorsum. Neuration normal.

*glycinae*, Lew. *tristifica*, Hb.

PHALAENOIDES THORACOPHORA, n. sp.

(*θωρακοφορος*, wearing a breastplate).

♀, 50 mm. Head yellow, apex of frontal process and an interrupted bar between antennae blackish. Palpi yellow; upper and lower edge of second joint blackish; terminal joint wholly blackish. Antennae blackish. Thorax [partly abraded] yellow with blackish spots; pectus yellow. Abdomen fuscous; terminal segment and tuft yellow. Legs blackish; tibiae and femora partly whitish beneath; those of posterior pair wholly whitish beneath. Forewings triangular, costa gently arched, apex rounded, termen bowed, oblique; blackish with bluish and purple reflections; a narrow whitish-grey sub-basal fascia; median area whitish-grey, bounded anteriorly by a line from  $\frac{1}{6}$  costa to  $\frac{1}{4}$  dorsum, posteriorly by a line from  $\frac{3}{5}$  costa nearly to tornus, containing a blackish line along costa, a large oval antemedian spot, an incomplete fascia from beneath midcosta, expanding on dorsum and continued to tornus; veins on posterior area grey; cilia blackish. Hindwings with termen rounded, somewhat irregular; blackish; a large basal white blotch not extending to margins nor extreme base; cilia blackish, towards tornus apices white. Underside blackish; forewings with a long oblique oval blotch

from beneath costa beyond middle nearly to tornus; hind-wings with basal white blotch extending to dorsum.

This species is very unlike its Australian congeners, but comes nearest to *P. basiplaga*, Roths., from New Guinea. It shows a general resemblance to the Pyralid *Vitessa glaucoptera*, Hmps. Type in National Museum, Melbourne.

*Hab.*—Northern Queensland: Claudie River, in March; one specimen, taken by Mr. J. A. Kershaw. Type in National Museum, Melbourne.

#### 6. Gen. AGARISTA, Leach.

Antennae less than  $\frac{1}{2}$ ; dilated beyond middle and hooked at apex. Frons with a truncate conical prominence with raised rim at apex. Palpi rather long, ascending; second joint with long dense rough hairs; terminal joint long, smooth. Abdomen hairy, not crested. Middle and posterior tibiae smooth. Neuration normal.

Distinguished from *Idalina* by the structure of the antennae.

*agricola*, Don.

#### 7. Gen. PERISCEPTA, nov. (περισκεπτος, conspicuous).

Antennae  $\frac{1}{2}$ ; filiform. Frons with a truncate conical prominence with raised rim at apex. Palpi short (less than 2), porrect; second joint hairy; terminal joint very short, hairy. Abdomen hairy, not crested. Posterior tibiae hairy on dorsum. Neuration normal.

Distinguished from *Phalaenoides* by the different antennae and palpi.

*polysticta*, Butl.

#### 8. Gen. ARGYROLEPIDIA, Hmps.

Antennae  $\frac{2}{3}$ ; filiform. Frons with a bluntly pointed conical prominence. Palpi rather long, ascending; second joint thickened with rather short, loosely appressed hairs; terminal joint long, smooth. Abdomen slightly hairy, with loose hairy crests on dorsum of basal segments. Posterior tibiae smooth or with a few loose hairs on dorsum. Neuration normal.

This description applies to the Australian species. I am unable to examine the type species as to the presence of abdominal crests, but these are inconspicuous and very easily denuded.

*fracta*, Roths. *coeruleotincta*, Luc. *centralis*, Roths.

†*econia*, Hmps. I have not seen this species and cannot say whether it is referable here. *subaspersa*, Wlk. In the event of these species not being congeneric with *Argyrolepidia*, the name *Coenotoca*, Turn., must be adopted.



## 9. Gen. PERIOPTA, nov. (περιοπτος, conspicuous).

Antennae  $\frac{1}{2}$  to  $\frac{2}{3}$ ; filiform. Frons with truncate conical prominence with raised rim at apex. Palpi moderate, ascending; second joint with rather short, loosely appressed hairs; terminal joint long, smooth. Abdomen smooth, with dorsal crests more or less developed. Posterior tibiae with long hairs on dorsum. Neuration normal.

*ardescens*, Butl. (Type). *diversa*, Wlk.

## 10. Gen. HECATESIA, Bdv.

Antennae  $\frac{3}{4}$ ; very slightly dilated (*thyridion*) or clubbed (*fenestrata*) before apex. Frons with short truncate conical prominence, with raised rim at apex concealed by long hairs. Palpi moderate or rather long, porrect or slightly ascending; terminal joint long, smooth (*thyridion*) or hairy (*fenestrata*). Abdomen very stout, smooth, with small dorsal tufts of hair on three basal segments, and with lateral tufts of hair on apical segments. Posterior tibiae with long hairs on dorsum. Forewings in female with 10 short-stalked or connate, 8, 9 from areole<sup>(1)</sup>; in male with a large ribbed hyaline subcostal area curved round a strong chitinous costal projection, and neuration much distorted. Hindwings normal.

*thyridion*, Feist. *fenestrata*, Bdv. † *exultans*, Wlk.

The exact affinities of this curious genus are doubtful.

## 11. Gen. IDALIMA, Turn.

Antennae about  $\frac{1}{2}$ , rarely longer (*metasticta*) or shorter (*tetrapleura*); filiform. Frons with truncate conical prominence with raised rim at apex. Palpi moderate or rather long, ascending; second joint densely hairy beneath; terminal joint moderate or long, smooth. Abdomen smooth, not crested. Posterior tibiae smooth. Neuration normal.

*tetrapleura*, Meyr. † *hemiphragma*, Low. *affinis*, Bdv. *leonora*, Dbld. *metasticta*, Hmps. *aethrias*, Turn.: Trans. Roy. Soc. S. Austr., 1908, p. 55; of this *cyanobasis*, Hmps., is a synonym.

## 12. Gen. RADINOCERA, Hmps.

Antennae slightly over  $\frac{1}{2}$ ; filiform. Frons with a truncate conical prominence with raised rim at apex. Palpi ascending, in male moderate, in female rather long; second joint with rather long dense loosely appressed hairs; terminal joint in male very short, in female long, smooth. Abdomen smooth, with a fan-shaped crest of scales on first segment only. Posterior tibiae smooth. Neuration normal.

*maculosa*, Roths. † *placodes*, Low. † *vagata*, Wlk.

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(1) I have only one female (*fenestrata*) for examination.

## 13. Gen. AGARISTODES, Hmps.

Eyes small. Antennae  $\frac{1}{2}$ ; in male bipectinate to apex, in female biserrate. Frons rounded, densely covered with long hairs. Palpi moderate, porrect; second and terminal joint covered with long dense rough hairs. Abdomen hairy, not crested, apical segments with three lateral tufts of short hair in male, two in female. Femora with dense long hairs. Posterior tibiae smooth, with a few loose hairs on dorsum. Neuration normal.

*feisthameli*, H.-Sch.

*Hab.*—New South Wales: Adaminaby (3,500 ft.), in October; one specimen. Previously recorded only from Tasmania.

## 14. Gen. APINA, Wlk.

Eyes small, narrowed antero-posteriorly, posteriorly flattened. Antennae  $\frac{1}{2}$ ; in male bipectinate to apex, in female filiform. Frons with a long acute flattened corneous process, quadrangular and emarginate at apex. Palpi moderate, porrect; second and terminal joints with long loose spreading hairs. Abdomen hairy, not crested. Femora densely hairy. Posterior tibiae with long loose spreading hairs on dorsum. Neuration normal.

*callisto*, Wlk.

## 15. Gen. IPANICA, Hmps.

Eyes normal. Antennae over  $\frac{1}{2}$ ; in male slightly serrate and minutely ciliated, in female filiform. Frons with a long acute flattened, corneous process, rounded-rectangular at apex. Palpi rather long, porrect; second joint with dense appressed hairs; terminal joint long, smooth. Abdomen smooth, not crested. Femora hairy. Posterior tibiae with long loose hairs on dorsum. Neuration normal.

*cornigera*, Butl.

## Subfam. AGROTINAE.

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| 1. Fore tibiae with claws or spines ... ..                             | 2.                    |
| Fore tibiae without claws or spines ... ..                             | 9.                    |
| 2. Fore tibiae with terminal claws only ... ..                         | 3.                    |
| Fore tibiae with spines, with or without claws ... ..                  | 5.                    |
| 3. Fore tibiae with a single claw ... ..                               | 11. <i>Propatria</i>  |
| Fore tibiae with two claws ... ..                                      | 4.                    |
| 4. Fore tibiae shorter than first tarsal joint                         | 1. <i>Timora</i>      |
| Fore tibiae longer than first tarsal joint                             | 3. <i>Neocleptria</i> |
| 5. Fore tibiae with a few spines towards apex only ... ..              | 6.                    |
| Fore tibiae with numerous spines not confined to apical portion ... .. | 7.                    |
| 6. Fore tibiae shorter than first tarsal joint                         | 2. <i>Canthylidia</i> |
| Fore tibiae longer than first tarsal joint                             | 4. <i>Heliothis</i>   |

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|--|------------------------|
| 7. Fore tibiae shorter than first tarsal joint                                   | 8.                     |
| Fore tibiae longer than first tarsal joint                                       | 10. <i>Graphiphora</i> |
| 8. Frons prominent, rounded, with a small central depression with raised rim ... | 8. <i>Euxoa</i>        |
| Frons not prominent, and without central depression ...                          | 9. <i>Agrotis</i>      |
| 9. Abdomen crested ...   | 7. <i>Buciara</i>      |
| Abdomen not crested ...  | 10.                    |
| 10. Palpi with terminal joint very small ...                                     | 11.                    |
| Palpi with terminal joint moderate or rather long ...                            | 12.                    |
| 11. Posterior tibiae densely hairy on dorsum                                     | 5. <i>Astonycha</i>    |
| Posterior tibiae with only a few loose hairs on dorsum ...                       | 6. <i>Adisura</i>      |
| 12. Thorax with rounded anterior and small posterior crests ...                  | 12. <i>Proteuxoa</i>   |
| Thorax without crests ...  | 13. <i>Androdes</i>    |

### 1. Gen. TIMORA, Wlk.

Frons rounded, projecting. Palpi rather short (1); second joint with short loosely appressed hairs; terminal joint short, stout, obtuse. Thorax and abdomen without crests. Anterior tibiae shorter than first tarsal joint, broad, with a terminal pair of strong claws, the inner larger, and no spines. Middle and posterior tibiae with a few spines; posterior tibiae hairy on dorsum. Forewings with 10 arising from apex of areole, which is narrow, connate with 8, 9, 7 also connate with 8, 9 or short-stalked, 6 from well below angle of cell. Hindwings normal.

So far as the Australian species is concerned its generic position rests on the structure of the anterior tibiae, and a well-defined neurational character, the three (rarely reduced to two) veins arising connate from the apex of the areole. I cannot say whether the latter character is present in the other species referred to this genus.

*alarioides*, Butl.

### 2. Gen. CANTHYLIDIA, Butl.

Frons rounded, projecting. Palpi moderate, porrect or obliquely ascending; second joint loosely rough-haired beneath; terminal joint short. Thorax and abdomen without crests. Anterior tibiae shorter than first tarsal joint, broad, with a terminal pair of strong claws, the inner larger, and one or two small spines on inner side. Middle and posterior tibiae with a few spines; posterior tibiae hairy on dorsum. Forewings with 6 from well below angle of cell. Hindwings normal.

A characteristically Australian genus of some size. The male gland and brands mentioned by Hampson are present in *pallida*, but not in other species. Hampson identifies it

with *Melicleptria*, Hb., represented by a solitary European species which I am not able to examine.

† *cistella*, Swin. *eurhythma*, Turn.: Proc. Roy. Soc. Q'land, 1915, p. 21. *eodora*, Meyr. *cladota*, Swin. † *mesoleuca*, Low.: Proc. Linn. Soc. N.S. Wales, 1901, p. 640. *neurias*, Meyr. *rhodopolia*, Turn.: Ann. Q'land Mus., x., p. 61 (1911). † *cramboides*, Gn. *osmida*, Swin. *ionola*, Swin. *pallida*, Butl. *ferruginosa*, Turn.: l.c., p. 61 (1911), *canusina*, Swin. *aleurota*, Low.: Proc. Linn. Soc. N.S. Wales, 1901, p. 641. *moribunda*, Gn. † *aberrans*, Butl. *melibaphes*, Hmps.

CANTHYLIDIA EPIGRAPHA, n. sp. (επιγραφος, inscribed).

♀, 25 mm. Head, palpi, thorax, and abdomen pale brownish-ochreous. Antennae pale fuscous. Legs whitish-ochreous. Forewings triangular, costa slightly arched, apex round-pointed, termen slightly bowed, scarcely oblique; whitish-ochreous with patchy brownish-ochreous irroration; a minute blackish dot representing orbicular; reniform fairly large, blackish, somewhat quadrate; claviform obsolete; a suffused blackish interrupted subterminal line; a terminal series of blackish dots on veins; cilia whitish-ochreous. Hindwings with termen sinuate; whitish-ochreous; a broad, suffused, fuscous, terminal band; cilia whitish-ochreous. Underside similar but forewings with general fuscous irroration, hindwings with terminal band narrower.

Allied to *C. cistella*, Swin.

*Hab.*—Northern Territory: Port Darwin; one specimen, received from Mr. G. F. Hill.

### 3. Gen. NEOCLEPTRIA, Hmps.

Frons rounded, projecting. Palpi moderately long, porrect; second joint loosely rough-haired beneath; terminal joint short. Thorax and abdomen without crests. Anterior tibiae longer than first tarsal joint, with a terminal pair of claws, and no spines. Middle and posterior tibiae with many spines; posterior tibiae hairy on dorsum. Neuration normal.

Differs from *Heliothis* in the absence of spines on anterior tibiae.

*punctifera*, Wlk.

### 4. Gen. HELIOTHIS, Ochs.

Frons rounded, projecting. Palpi moderately long, porrect; second joint loosely rough-haired beneath; terminal joint short. Thorax and abdomen without crests. Anterior tibiae longer than first tarsal joint, with a terminal pair of claws, and spines on sides. Middle and posterior tibiae with

many spines; posterior tibiae hairy on dorsum. Neuration normal.

I follow Mr. Meyrick (Trans. N. Z'd. Inst., 1911, p. 90) in adopting Ochsenheimer's name for this genus with *dipsacea*, Lin., as the type.

*aresca*, Turn.: Ann. Q'land Mus., x., p. 60 (1911).  
*obsoleta*, Fab. *assulta*, Gn.

HELIOTHIS HYPERCHROA, n. sp. (ὑπερχροος, highly coloured).

♂, ♀, 28-35 mm. Head and thorax crimson. Palpi whitish-ochreous, sometimes almost wholly suffused with crimson. Antennae pale grey, towards base crimson; ciliations in male  $\frac{1}{2}$ . Abdomen whitish-ochreous, basal dorsal crest crimson; tuft with some crimson suffusion. Legs whitish-ochreous, mostly suffused with crimson. Forewings crimson, with darker transverse crimson lines more or less marked; orbicular obsolete or faintly indicated; reniform small, fuscous, with paler centre; a subterminal series of whitish dots on veins; cilia crimson. Hindwings ochreous-whitish; a broad terminal fuscous band, sometimes edged anteriorly and posteriorly by crimson; cilia ochreous-whitish, bases sometimes crimson. Underside whitish-ochreous with broad terminal bands partly crimson, partly fuscous.

Though this may be merely a local mountain form of *C. obsoleta*, it is a brilliant insect, quite distinct from *C. rubescens*, Wlk., which is a dark Brisbane form of *obsoleta*, scarcely reddish.

*Hab.*—Queensland: Stanthorpe; New South Wales: Lawson (Blue Mountains); Tasmania.

5. Gen. ASTONYCHA, nov. (ἄστονυχος, clawless).

Frons rounded, projecting. Eyes large, round, glabrous, without cilia. Tongue strong. Palpi moderate (over 1), slightly ascending; second joint long, rather shortly rough-scaled; terminal joint very short. Antennae in male simple, minutely ciliated. Thorax and abdomen not crested. Anterior tibiae without spines or claws; middle tibiae with two spines on inner side shortly before apex; posterior tibiae with two spines on inner side before apex, and densely hairy. Neuration normal.

Allied to the *Heliothis* group, though without tibial claws. The number of tibial spines may not be constant.

ASTONYCHA LITARGA, n. sp. (λιταργος, nimble).

♂, 32 mm. Head, palpi, thorax, and abdomen ochreous-whitish. Antennae pale grey; ciliations in male  $\frac{1}{3}$ . Legs



ochreous-whitish; anterior pair, except coxae, fuscous. Forewings triangular, costa straight to near apex, apex round-pointed, termen straight, oblique, slightly wavy; ochreous-whitish with some subcostal fuscous irroration; markings pale fuscous; a basal patch margined by a darker line from  $\frac{1}{4}$  costa to near middle of dorsum; orbicular and reniform represented by subquadrate spots before and beyond middle; a broad terminal band margined by a darker line from near  $\frac{3}{4}$  costa obliquely outwards, forming a sharp apical curve, thence sinuate to  $\frac{2}{3}$  dorsum; cilia ochreous-whitish. Hindwings with termen slightly rounded, wavy; whitish; a large central terminal pale-fuscous blotch; cilia whitish. Underside whitish; markings of forewings faintly indicated.

*Hab.*—Queensland: Rosewood, in April; one specimen, taken flying at dusk.

#### 6. Gen. ADISURA, Moore.

Frons rounded, projecting. Palpi moderate, obliquely ascending; second joint thickened, with short, loosely appressed hairs; terminal joint short, obtuse. Thorax and abdomen without crests. Anterior tibiae without spines. Middle and posterior tibiae with a few spines; posterior tibiae smooth, with a few loose hairs on dorsum. Neuration normal.  
*dulcis*, Moore.

#### 7. Gen. BUCIARA, Wlk.

Frons not projecting. Palpi long, ascending; second joint with dense long rough hairs beneath; terminal joint long, smooth, porrect. Thorax with rounded anterior and strong posterior crest; patagia long, projecting. Abdomen with dorsal crests on second and third segments. Anterior tibiae without spines. Posterior tibiae with one or two spines and with long hairs on dorsum. Forewings with small tufts of scales near base and before tornus. Neuration normal.

*bipartita*, Wlk.

#### 8. Gen. EUXOA, Hb.

Frons rounded, projecting, at its apex a minute circular depression with raised edges. Palpi rather long, ascending; second joint shortly rough-haired beneath; terminal joint moderate or rather long, smooth. Thorax with a rounded anterior and small posterior crest. Abdomen without crests. Anterior tibiae shorter than first tarsal joint, broad, with numerous strong spines on sides and apex. Middle and posterior tibiae with numerous spines; posterior tibiae smooth, with some long hairs towards base of dorsum. Neuration normal.

Closely allied to *Agrotis*, from which it differs only in the structure of the frons.

*radians*, Gn. *porphyricollis*, Gn.; of this *transversa*, Wlk.: Char. Undesc. Lep., p. 70, is a synonym. †*repanda*, Wlk. †*interjectionis*, Gn.

#### 9. Gen. AGROTIS, Ochs.

Frons not projecting. Palpi rather long, ascending; second joint shortly rough-haired beneath; terminal joint moderate, smooth. Thorax with a rounded anterior and small posterior crests. Abdomen not crested. Anterior tibiae shorter than first tarsal joint, broad, with numerous strong spines on sides and apex. Middle and posterior tibiae with numerous spines; posterior tibiae smooth with long hairs on basal part of dorsum. Neuration normal.

*poliotis*, Hmps. *ypsilon*, Roths. *infusa*, Bdv.; slightly variable; I have no doubt that *spina*, Gn., is a synonym, though Hampson places the two in different genera.

#### 10. Gen. GRAPHIPHORA, Ochs.

Frons not, or only slightly, projecting. Palpi moderately long, ascending; second joint thickened, with rather smoothly appressed hairs, especially towards apex, which is expanded; terminal joint moderate, smooth, often porrect. Thorax with rounded anterior crest. Abdomen with long hairs at base of dorsum but without crests. Anterior tibiae longer than first tarsal joint, not expanded at apex, with a series of fine spines on inner edge, and one or two on outer edge near apex. Middle and posterior tibiae with numerous spines; posterior tibiae smooth, hairy on dorsum except towards apex. Neuration normal.

Differs from *Agrotis* in the anterior tibiae and palpi. A large cosmopolitan genus.

*compta*, Wlk.

#### 11. Gen. PROPATRIA, Hmps.

Frons rounded-conical, projecting, at its apex a shallow circular depression with raised edge. Palpi rather long; second joint obliquely ascending, densely rough-haired beneath; terminal joint porrect, rather long, smooth. Thorax with rounded anterior crest. Abdomen not crested. Anterior tibiae longer than first tarsal joint, with a single strong anterior apical claw, without spines. Middle and posterior tibiae with one or two spines towards apex; posterior tibiae hairy on dorsum. Neuration normal.

*neuroides*, Swin. *mundoides*, Low.: Trans. Roy. Soc. S. Austr., 1893, p. 152.

## 12. Gen. PROTEUXOA, Hmps.

Frons rounded, slightly projecting. Palpi rather long, ascending; second joint shortly rough-haired beneath; terminal joint moderate or long, smooth, sometimes porrect. Thorax with rounded anterior and small posterior crest. Abdomen without crests. Anterior tibiae without spines. Posterior tibiae with one or two spines, and with long hairs on dorsum. Neurulation normal.

I can see no sufficient reason for distinguishing *Ectopatria*, Hmps., from this genus.

† *nniodes*, Low.: Proc. Linn. Soc. N.S. Wales, 1901, p. 642. *amaurodes*, Low.: l.c., p. 642. *paurogramma*, Low.: l.c., p. 643. † *spilonota*, Low.: l.c., p. 641. *sub-rufescens*, Wlk. *aspera*, Wlk. *umbrosa*, Hmps. *loxosema*, Turn.: Trans. Roy. Soc. S. Austr., 1908, p. 55. *spodias*, Turn.: l.c., p. 56.

## 13. Gen. ANDRODES, nov. (ἀνδρῶδης, masculine),

Frons not projecting. Palpi moderate, ascending; second joint thickened, with loosely appressed scales; terminal joint short, smooth, obtuse. Thorax and abdomen without crests. Anterior tibiae without spines. Posterior tibiae with a few spines; in male densely hairy, in female hairy on dorsum. Wings of male wholly or partly covered with modified scales on underside. Neurulation normal.

The two following species with their spineless anterior tibiae are quite out of place in the genus *Agrotis*. They are more nearly allied to *Proteuxoa*.

*tibiata*, Gn.; type. *hypochalchis*, Turn.

## Subfam. MELANCHRINAE.

(*Polianae*, Hmps.)

I am unable to accept Hampson's name for this group and many of his generic distinctions. For a discussion of the points involved I would refer the student to a paper by Mr. E. Meyrick, F.R.S., in the Transactions of the New Zealand Institute, 1912, p. 88.

- |   |     |                     |
|---|-----|---------------------|
| 1. Thorax and abdomen without crests  | ... | 2.                  |
| Thorax and abdomen with crests  | ... | 4.                  |
| 2. Frons projecting, a large apical depression with raised edges containing a central, truncate, corneous process | ... | 1. <i>Metopiora</i> |
| Frons not so formed   | ... | 3.                  |
| 3. Posterior tibiae smooth  | ... | 3. <i>Meliana</i>   |
| Posterior tibiae hairy on dorsum  | ... | 4. <i>Leucania</i>  |
| 4. Abdomen with small crest on basal segment only   | ... | 5.                  |
| Abdomen with more than one crest  | ... | 7.                  |

- |  |                      |
|--|----------------------|
| 5. Tongue short and weakly developed ...                             | 2. <i>Brithys</i>    |
| Tongue strong ... ..   | 6.                   |
| 6. Abdomen with lateral tufts of hair, more developed in male ... .. | 5. <i>Dasygaster</i> |
| Abdomen without lateral tufts ... ..                                 | 6. <i>Sideridis</i>  |
| 7. Thorax with sharp, ridge-like anterior crest ... ..               | 7. <i>Tiracola</i>   |
| Thorax with rounded anterior crest ...                               | 8. <i>Melanchra</i>  |

### 1. Gen. METOPIORA, Meyr.

Tongue short and weakly developed. Frons projecting, with a large circular apical depression with raised rim containing a central circular truncate corneous process. Palpi short, ascending; second joint with short loosely appressed hairs; terminal joint small, slender. Thorax and abdomen without crests. Posterior tibiae hairy on dorsum. Neuration normal.

*sanguinata*, Luc.

### 2. Gen. BRITHYS, Hb.

Tongue short and weakly developed. Frons rounded, very slightly projecting. Palpi short, obliquely ascending; second joint densely rough-haired; terminal joint minute, concealed. Thorax with small posterior crest. Abdomen with small crest on basal segment. Posterior tibiae hairy on dorsum. Neuration normal.

*crini*, Fab.

### 3. Gen. MELIANA, Curt.

Frons not projecting. Palpi moderate, obliquely ascending; second joint with loosely appressed hairs; terminal joint short. Thorax and abdomen not crested. Posterior tibiae smooth. Neuration normal.

Type, *flammea*, Curt. Hampson describes the frons as showing a rounded prominence, which is not the case in the Australian species. However this may be, the smooth posterior tibiae should be made the distinction between this genus and *Leucania*.

*lewini*, Butl. *scotti*, Butl. *microsticta*, Turn.: Proc. Linn. Soc. N.S. Wales, 1909, p. 341.

### 4. Gen. LEUCANIA, Ochs.

Frons not projecting. Palpi moderate, porrect or obliquely ascending; second joint with loosely appressed hairs; terminal joint small. Thorax and abdomen without crests. Posterior tibiae hairy on dorsum. Neuration normal.

*cruegeri*, Butl. *melanopasta*, Turn.

## 5. Gen. DASYGASTER, Gn.

Frons not projecting. Palpi rather long, ascending; second joint densely rough-haired beneath; terminal joint moderate or rather long, smooth. Thorax with rounded anterior and small or moderate posterior crests. Abdomen with small crest on basal segment; in male covered with woolly hair; with lateral tufts, longer in male. Posterior tibiae hairy. Neuration normal.

*eugrapha*, Hmps. *ligniplena*, Wlk. † *nephelistis*, Hmps. *hollandiae*, Gn. *epundoides*, Gn. *reversa*, Moore.

DASYGASTER EPIPOLIA, n. sp. (ἐπιπολιος, grizzled).

♀, 46 mm. Head, palpi, and thorax whitish, densely irrorated with dark fuscous. Antennae fuscous, near base whitish. Abdomen grey. Legs whitish, irrorated with fuscous. Forewings elongate, costa very slightly arched, apex rounded-rectangular, termen slightly bowed, slightly oblique, crenulate; whitish, densely irrorated with fuscous; markings fuscous, nearly obsolete; some longitudinal streaks on and between veins; reniform indistinctly outlined; a terminal series of interneural dots; cilia fuscous with indistinct basal, median, and terminal whitish lines. Hindwings with termen sinuate and crenulate; fuscous; cilia whitish with a sub-basal fuscous line. Underside of forewings fuscous; of hindwings whitish with fuscous irroration, round discal spot, and terminal band.

The male may have more developed markings. The species may be recognized by the large size, and elongate and uniformly grey forewings. Type in Coll. Goldfinch.

*Hab.*—New South Wales: Mount Kosciusko (5,000 ft.), in January; one specimen.

## 6. Gen. SIDERIDIS, Hb.

Frons not projecting. Palpi rather long, ascending; second joint with loosely appressed hairs or slightly rough; terminal joint moderate or rather long, sometimes porrect. Thorax with rounded anterior and small posterior crest. Abdomen with small crest on basal segment; slightly or densely hairy. Posterior tibiae densely hairy, or at least hairy on dorsum. Neuration normal.

A cosmopolitan genus for which Mr. Meyrick prefers the name *Aletia*, Hb. It is the genus most developed in Australia, and presents slight differences in the palpi and in the hairiness of the abdomen and legs. The basal abdominal crest is often concealed and difficult of observation.

*eboriosa*, Gn. † *costalis*, Wlk. *obusta*, Gn. *diatrecta*, Butl. † *uda*, Gn. *abdominalis*, Wlk. *dasyenema*, Turn.:



Mem. Nat. Mus., Melb., iv., p. 21 (1912). *leucosta*, Low. *leucosphenia*, B-Bak. *Hab.*—Northern Queensland: Ingham; one specimen, in Coll. Goldfinch. *rhodopsara*, Turn.: Ann. Q'land Mus., x., p. 62 (1911). *ciliata*, Wlk.; of this *adjuncta*, Wlk.: Char. Undesc. Lep., p. 68, is a synonym (*nec* Hmps., v., p. 489). *exarans*, Luc.: Proc. Linn. Soc. N.S. Wales, 1893, p. 141; of this *orthomita*, Turn.: Trans. Roy. Soc. S. Austr., 1908, p. 56, is a synonym. *decisissima*, Wlk.; of this *aureola*, Luc.: Proc. Linn. Soc. N.S. Wales, 1889, p. 1097, is a synonym. *porphyrodes*, Turn.: Ann. Q'land Mus., x., p. 63 (1911). *acontosema*, Turn. *yu*, Gn. *venalba*, Moore. *dentosa*, Turn.: *l.c.*, p. 62 (1911). *loreyi*, Dup. *polysticha*, Turn. *xanthosticha*, Turn.: *l.c.*, p. 64 (1911). *unipuncta*, Haw. *subsignata*, Moore. *obumbrata*, Luc. *irregularis*, Wlk. *ewingii*, Westw. This species is the type of *Persectania*, Hmps., a genus recognized both by Sir George Hampson and Mr. Meyrick, as distinguished by the frons forming a slight rounded prominence with a corneous plate below it. Having rubbed off the palpi and frontal scales from examples of *ewingii*, *loreyi*, and *abdominalis*, I can find no difference between them.

*SIDERIDIS VIBICOSA*, n. sp. (*vibicosus*, full of small scars).

♂, 35 mm. Head whitish with a few fuscous scales. Palpi  $1\frac{1}{2}$ , second joint with loosely appressed scales, terminal joint short; ochreous-whitish, outer surface of second joint partly suffused with grey, with slight fuscous irroration. Antennae grey, paler towards base. Thorax whitish-grey irrorated with fuscous. Abdomen pale grey. Legs pale grey with some fuscous irroration; anterior coxae densely hairy, with purple-grey irroration. Forewings with costa slightly arched, apex rounded-rectangular, termen straight to near tornus, not oblique; whitish-grey suffused and irrorated with dark grey; paler towards base and costa; absence of irroration leaves a pale discal spot at  $\frac{3}{5}$ , and a large number of pale transverse strigulae in posterior part of disc; cilia dark grey with a pale basal line. Hindwings with termen wavy; whitish, towards margins suffused with grey; cilia grey with whitish basal line, towards tornus wholly whitish.

Although very inconspicuously coloured the numerous strigulae on forewings distinguish this from any Australian species.

*Hab.*—Queensland: Brisbane, in September; one specimen.

#### 7. Gen. *TIRACOLA*, Moore.

Frons not projecting. Palpi moderately long, ascending; second joint with loosely appressed hairs beneath;

terminal joint short, smooth, porrect. Thorax with a sharp, ridge-like anterior and a small posterior crest. Abdomen with small crests on first two segments. Posterior tibiae hairy on dorsum. Neuration normal.

*plagiata*, Wlk.

#### 8. Gen. MELANCHRA, Hb.

Frons not projecting. Palpi moderate, ascending; second joint shortly rough-haired beneath; terminal joint moderate, smooth. Thorax with rounded anterior and small posterior crests. Abdomen with several crests on basal segments. Posterior tibiae hairy on dorsum. Neuration normal.

Another large cosmopolitan genus.

*consanguis*, Gn. † *dictyota*, Low. *xanthocosma*, Turn.

#### Subfam. CUCULLIANAE.

This group is very scantily represented in Australia.

- |  |                      |
|--|----------------------|
| 1. Frons with a strong, conical, pointed prominence ... .. | 1. <i>Gyroprora</i>  |
| Frons not projecting ... ..                                | 2.                   |
| 2. Tegulae forming a sharp dorsal ridge ...                | 2. <i>Neumichtis</i> |
| Tegulae not so formed ... ..                               | 3. <i>Eumichtis</i>  |

#### 1. Gen. GYROPRORA, Turn.: Ann. Q'land Mus., x., p. 64 (1911).

Frons with a strong, obtusely pointed, corneous, conical prominence. Antennae of male bipectinated to apex. Palpi moderately long, porrect; second joint shortly rough-haired beneath; terminal joint moderate, smooth. Thorax and abdomen without crests. Posterior tibiae densely hairy. Neuration normal.

Probably allied to the European *Aporophyla*, Gn. *ochrias*, Turn.: *l.c.*, p. 64 (1911).

#### 2. Gen. NEUMICHTIS, Hmps.

Frons not projecting. Palpi rather long, ascending; second joint rough-haired beneath; terminal joint moderate, smooth. Thorax with a sharp, ridge-like, anterior crest formed by tegulae and a small bifid posterior crest. Abdomen with a series of dorsal crests. Posterior tibiae hairy on dorsum. Neuration of forewings normal. Hindwings with 5 weakly developed from below middle of cell ( $\frac{1}{3}$ ).

*trijuncta*, Wlk.

#### NEUMICHTIS ARCHEPHANES, n. sp.

(ἀρχεφάνης, of chiefly appearance).

♀, 48 mm. Head, palpi, and thorax dark fuscous, densely irrorated with white. Antennae dark fuscous. Abdomen

grey mixed with whitish, crests fuscous. Legs fuscous with whitish irroration. Forewings elongate-triangular, costa nearly straight, apex round-pointed, termen bowed, oblique, crenulate; fuscous-grey; markings white edged with blackish; a dentate sub-basal line from costa near base to fold; a crenulate, outwardly oblique line from  $\frac{1}{2}$  costa to  $\frac{2}{3}$  dorsum; orbicular and reniform very distinct, the former large, 8-shaped, the latter still larger, kidney-shaped; claviform obsolete; a postmedian fascia, its inner edge angled outwards beneath costa and on vein 2, outer edge less distinct, veins crossing it partly blackish, a fine dentate subterminal line, bent outwards and more sharply dentate between veins 3 and 4; triangular blackish terminal dots between veins; cilia grey with some whitish irroration, and finely barred with white opposite veins. Hindwings with termen gently rounded, irregularly waved; fuscous with darker lines on veins; costa whitish; a blackish terminal line obsolete towards tornus; cilia grey, bases whitish, apices white. Underside of forewings fuscous with two dark lines before termen; of hindwings whitish irrorated with fuscous, with large fuscous discal lunule and terminal band.

Nearly allied to *trijuncta*, Wlk., but considerably larger, the antemedian line crenulate, more oblique, running to mid-dorsum, projections on postmedian line bluntly rounded.

*Hab.*—New South Wales: Mount Kosciusko (5,000 ft.), in January; one specimen.

### 3. Gen. EUMICHTIS, Hb.

Frons not projecting. Palpi rather long, ascending; second joint densely rough-haired beneath; terminal joint moderate, smooth. Thorax with a rounded anterior and bifid posterior crest. Abdomen with a series of dorsal crests. Posterior tibiae hairy on dorsum. Neuration of forewings normal. Hindwings with 5 from below middle of cell ( $\frac{1}{3}$ ).

*sepultrix*, Gn. *saliaris*, Gn. *mesophaea*, Hmps.  
† *extima*, Wlk.

### Subfam. ACRONYCTINAE.

This is a most difficult group, and I cannot expect that the following revision will be found completely satisfactory. The length of the cell and the point of origin of vein 5 in the hindwings sometimes furnish good generic characters. The last is expressed numerically; for instance,  $\frac{1}{3}$  connotes that 5 arises from  $\frac{1}{3}$  of the distance between the lower and upper angle of the cell reckoning from the former. I include here the genus *Amyna*.

- |   |     |
|---|-----|
| 1. Abdomen with one or more dorsal crests | 2.  |
| Abdomen without crests ... ..             | 23. |

- |  |                        |
|--|------------------------|
| 2. Abdomen with three or more dorsal crests        | 3.                     |
| Abdomen with basal crest only, or (rarely)         |                        |
| a crest also on second segment ... ..              | 12.                    |
| 3. Hindwings with 8 anastomosing with cell         |                        |
| at $\frac{1}{3}$ ... ..                            | 1. <i>Magusa</i>       |
| Hindwings with 8 anastomosing with cell            |                        |
| before $\frac{1}{4}$ ... ..                        | 4.                     |
| 4. Hindwings with cell $\frac{2}{5}$ ... ..        | 2. <i>Cosmodes</i>     |
| Hindwings with cell $\frac{1}{2}$ or less ... ..   | 5.                     |
| 5. Forewing with subapical dorsal tuft ... ..      | 6.                     |
| Forewing without dorsal tuft ... ..                | 8.                     |
| 6. Forewing with areole absent ... ..              | 3. <i>Musothyma</i>    |
| Forewing with areole present ... ..                | 7.                     |
| 7. Palpi moderate, porrect ... ..                  | 4. <i>Eriopus</i>      |
| Palpi long, appressed to frons, exceeding          |                        |
| vertex ... ..                                      | 5. <i>Data</i>         |
| 8. Thorax with anterior crest ... ..               | 9.                     |
| Thorax without anterior crest ... ..               | 11.                    |
| 9. Frons with rounded prominence ... ..            | 8. <i>Cycloprora</i>   |
| Frons without prominence ... ..                    | 10.                    |
| 10. Forewings with 8, 9, 10 stalked from           |                        |
| areole ... ..                                      | 6. <i>Pansemna</i>     |
| Forewings with 10 arising separately               |                        |
| from areole ... ..                                 | 7. <i>Euplexia</i>     |
| 11. Palpi with first and second joints triangu-    |                        |
| larly dilated ... ..                               | 12. <i>Calogramma</i>  |
| Palpi not so formed ... ..                         | 13. <i>Prodenia</i>    |
| 12. Thorax crested ... ..                          | 13.                    |
| Thorax not crested ... ..                          | 21.                    |
| 13. Frons projecting ... ..                        | 14.                    |
| Frons not projecting ... ..                        | 19.                    |
| 14. Frontal prominence with circular apical        |                        |
| depression ... ..                                  | 15.                    |
| Frontal prominence without apical de-              |                        |
| pression ... ..                                    | 17.                    |
| 15. Frontal depression minute ... ..               | 16.                    |
| Frontal depression large and containing            |                        |
| an acute corneous process ... ..                   | 15. <i>Thegalea</i>    |
| 16. Hindwings with 8 anastomosing with cell        |                        |
| at $\frac{1}{4}$ ... ..                            | 9. <i>Molvana</i>      |
| Hindwings with 8 anastomosing before $\frac{1}{6}$ |                        |
| 17. Hindwings with 5 from much below               | 10. <i>Thalatha</i>    |
| middle ( $\frac{1}{4}$ ) ... ..                    | 16. <i>Hypoperigea</i> |
| Hindwings with 5 from middle of cell ... ..        | 18.                    |
| 18. Frontal prominence pointed ... ..              | 44. <i>Leucogonia</i>  |
| Frontal prominence rounded ... ..                  | 45. <i>Metaxanthia</i> |
| 19. Hindwings with discocellulars angled ... ..    | 14. <i>Spodoptera</i>  |
| Hindwings with discocellulars not angled           |                        |
| 20. Palpi with third joint porrect ... ..          | 20.                    |
| Palpi with third joint erect ... ..                | 17. <i>Namangana</i>   |
| 21. Abdomen with short lateral tufts of hair       |                        |
| Abdomen smooth ... ..                              | 19. <i>Phaeopyra</i>   |
| 22. Palpi smooth ... ..                            | 11. <i>Acronycta</i>   |
| Palpi rough anteriorly ... ..                      | 22.                    |
| 23. Thorax crested ... ..                          | 26. <i>Chasmina</i>    |
| Thorax without, or with only very small            |                        |
| rudimentary crests ... ..                          | 42. <i>Amyna</i>       |
|  | 24.                    |
|  | 34.                    |



|  |                         |
|--|-------------------------|
| 24. Frons not projecting ... ..                | 25.                     |
| Frons projecting ... ..                        | 29.                     |
| 25. Thorax with anterior crest ... ..          | 26.                     |
| Thorax without anterior crest ... ..           | 28.                     |
| 26. Anterior thoracic crest triangular, acute  | 23. <i>Lophocalama</i>  |
| Anterior thoracic crest rounded ... ..         | 27.                     |
| 27. Palpi with terminal joint porrect ... ..   | 18. <i>Luperina</i>     |
| Palpi with terminal joint erect ... ..         | 20. <i>Phacomorpha</i>  |
| 28. Abdomen with dense lateral tufts ... ..    | 24. <i>Peripyra</i>     |
| Abdomen without lateral tufts ... ..           | 28.                     |
| 28. Patagia elongate ... ..                    | 43. <i>Zalissa</i>      |
| Patagia not elongate ... ..                    | 25. <i>Diplonephra</i>  |
| 29. Posterior tibiae smooth ... ..             | 30.                     |
| Posterior tibiae hairy on dorsum ... ..        | 32.                     |
| 30. Frons with minute apical depression ...    | 28. <i>Paromphale</i>   |
| Frons without apical depression ... ..         | 31.                     |
| 31. Frons acutely projecting at lower edge ... | 29. <i>Eccleta</i>      |
| Frons rounded ... ..                           | 30. <i>Aucha</i>        |
| 32. Tongue weak or absent, neuration normal    | 33.                     |
| Tongue strongly developed, forewings           |                         |
| without areole ... ..                          | 33. <i>Prometopus</i>   |
| 33. Frons with apical depression ... ..        | 31. <i>Eremochroa</i>   |
| Frons without apical depression ... ..         | 32. <i>Micropia</i>     |
| 34. Frons projecting ... ..                    | 35.                     |
| Frons not projecting ... ..                    | 39.                     |
| 35. Tongue weakly developed ... ..             | 35. <i>Azenia</i>       |
| Tongue strongly developed ... ..               | 36.                     |
| 36. Frons with a large apical depression, in   |                         |
| its centre a corneous process ... ..           | 37.                     |
| Frons not so formed ... ..                     | 36. <i>Dinoprora</i>    |
| 37. Anterior tibiae with an apical claw ...    | 34. <i>Calophasidia</i> |
| Anterior tibiae without claw ... ..            | 38.                     |
| 38. Posterior tibiae smooth ... ..             | 36. <i>Aegle</i>        |
| Posterior tibiae hairy on dorsum ... ..        | 37. <i>Omphaletis</i>   |
| 39. Tongue weak or absent ... ..               | 40.                     |
| Tongue strongly developed ... ..               | 41.                     |
| 40. Palpi slender, male antennae not pectinate | 21. <i>Sesamia</i>      |
| Palpi thickened with loose hairs, male         |                         |
| antennae pectinate to apex ... ..              | 22. <i>Bathytricha</i>  |
| 41. Posterior tibiae smooth ... ..             | 39. <i>Radinogoës</i>   |
| Posterior tibiae hairy on dorsum ... ..        | 42.                     |
| 42. Hindwings with 5 from well below middle    | 43.                     |
| Hindwings with 5 from middle of cell ...       | 41. <i>Caradrina</i>    |
| 43. Palpi with second joint dilated towards    |                         |
| apex ... ..                                    | 40. <i>Leucocosmia</i>  |
| Palpi with second joint not dilated ... ..     | 27. <i>Callyna</i>      |

### 1. Gen. MAGUSA, Wlk.

Frons not projecting. Palpi long, ascending, exceeding vertex; second joint with appressed hairs; terminal joint long. Thorax with rounded anterior and small bifid posterior crests. Abdomen with four or five dorsal crests. Posterior tibiae hairy on dorsum. Forewings normal. Hindwings with cell about  $\frac{1}{3}$ ; 8 anastomosing with cell at  $\frac{1}{3}$ .

*olivaria*, Hmps. *Hab.*—Northern Queensland: Cairns.  
*tenebrosa*, Moore.



## 2. Gen. COSMODES, Gn.

Frons not projecting. Palpi moderate, ascending; second joint with loosely appressed hairs; terminal joint short. Thorax with large anterior and posterior crests. Abdomen with a large dorsal crest on third segment and minute crests on first two segments. Posterior tibiae hairy on dorsum. Forewings with small tornal projection. Neuration normal. Hindwings with cell  $\frac{2}{5}$ .

*elegans*, Don.

## 3. Gen. MUSOTHYMA, Meyr.

Frons with slight rounded projection. Palpi long, slender, obliquely ascending; second joint rough-scaled; terminal joint rather long. Thorax with small posterior crest. Abdomen with dorsal crests on first three segments, that on third segment large. Posterior tibiae smooth. Forewings with a dorsal tuft before tornus; areole minute or absent, 7 and 10 arising separately from cell. Hindwings with discocellulars angled, 5 from below middle ( $\frac{1}{3}$ ), 8 anastomosing with cell at  $\frac{1}{4}$ .

*cyanastis*, Meyr.

## 4. Gen. ERIOPUS, Treit.

Frons not projecting. Palpi moderate, obliquely ascending, not appressed to frons; second joint rough-haired beneath and also above towards apex; terminal joint moderate, porrect. Thorax with a small posterior crest. Abdomen with large crests on three basal segments. Posterior tibiae densely hairy. Forewings with a small dorsal scale-tuft before tornus. Neuration normal. Hindwings with cell  $\frac{2}{5}$ ; 5 from below middle ( $\frac{1}{3}$ ).

*ferruginea*, Hmps. (my example has no abdominal crests, but they may have been denuded). *rivularis*, Wlk. *mailardi*, Gn.

## 5. Gen. DATA, Wlk.

Frons not projecting. Palpi long, ascending, appressed to frons, exceeding vertex; second joint with loosely appressed hairs; terminal joint long, erect. Thorax with rounded anterior and bifid posterior crests. Abdomen with dorsal crests on three or four basal segments. Posterior tibiae densely hairy. Forewings with small dorsal scale-tuft before tornus. Neuration normal. Hindwings with cell  $\frac{2}{5}$ ; 5 from slightly below middle.

*thalpophiloides*, Wlk.

6. Gen. PANSEMNA, nov. (*πανσεμνος*, very stately).

Frons not projecting. Palpi very long, ascending, appressed to frons, much exceeding vertex; second joint

slightly roughened; terminal joint very long ( $\frac{2}{3}$  of second joint). Thorax with anterior and posterior crests. Abdomen with dorsal crests on three or four basal segments. Posterior tibiae hairy. Forewings with 8, 9, 10 stalked from areole. Hindwings with 5 from below middle ( $\frac{1}{3}$ ).

Clearly defined by the long-stalking of vein 10 of forewings.

*beryllodes*, Turn.

#### 7. Gen. EUPLEXIA, Stph.

Frons not projecting. Palpi moderate, ascending; second joint rough-haired; terminal joint moderate. Thorax with rounded or bifid anterior and bifid posterior crests. Abdomen with dorsal crests on three or four basal segments. Posterior tibiae hairy on dorsum. Forewings normal. Hindwings with 5 from below middle.

A large cosmopolitan genus, for which the name *Euplexia* may be conveniently adopted for the present, though no doubt it will be ultimately superseded. To it I refer the Australian species which Hampson places under *Trachea* (except *smaragdists*, which is a *Phaeopyra*) and *Perigea*. There are slight specific differences in the form of the thoracic crests and in the length of the palpi, but any attempts to base generic definitions on these will, I think, break down in practice.

† *iorrhoa*, Meyr. † *trichroma*, Meyr. *bryochlora*, Meyr. *consummata*, Wlk. *prolifera*, Wlk. *adamantina*, Turn. † *signata*, Low. *polymeta*, Turn. *callisina*, Turn. *leucostigma*, Turn. † *callichroa*, Low. † *melanops*, Low. *dolorosa*, Wlk. *arowana*, B-Bak. *capensis*, Gn. *euarmosta*, Turn.: Ann. Q'land Mus., x., p. 65 (1911). *asbolodes*, Turn.: *ib.*, p. 66.

EUPLEXIA DOCIMA, n. sp. (δοκιμος, excellent).

♂, 34 mm. Head white; face with a transverse median black bar. Palpi black; apex and inner surface of second joint white; terminal joint white. Antennae dark fuscous, towards base white. Thorax white; bases of tegulae, outer edges of patagia, a transverse median bar, and base of posterior crest black. Abdomen whitish with median dorsal and lateral series of blackish dots; tuft whitish, at base blackish. Legs whitish; tibiae and tarsi annulated with blackish. Forewings elongate-triangular, costa slightly arched, apex rounded-rectangular, termen bowed, moderately oblique; white with black markings; a basal line; a sub-basal line from costa, outwardly oblique, bent sharply inwards below middle to near base of dorsum; closely following this

a leaden-grey fascia mixed with brownish towards costa, with a strong posterior projection above middle; a line from  $\frac{1}{4}$  costa obliquely outwards to fold, where it runs into claviform; a subcostal spot at  $\frac{1}{3}$  representing orbicular; seven costal spots, the first connected with a subcostal spot posterior to it, the fifth and sixth connected with a short transverse streak; five dorsal spots, above the fourth a short oblique streak bifurcating above, and preceded by a leaden-grey suffusion; a thin crescentic line with concavity outwards representing reniform; a blotch containing some leaden-grey and white scales posterior to this; three angular submarginal spots preceded by a slight grey suffusion; cilia white, sharply barred with black. Hindwings with termen rounded; fuscous; dorsal area suffused with white; a darker postmedian line; cilia fuscous with several white bars.

*Hab.*—New South Wales: Sydney (Hornsby), in March; one specimen in Coll. Lyell.

8. Gen. CYCLOPRORA, nov. (κυκλοπρωρος, with rounded prow).

Frons with rounded or somewhat conical prominence. Palpi moderate, ascending, appressed to frons; second joint slightly roughened anteriorly; terminal joint short. Thorax with rounded anterior and small posterior crests. Abdomen with a small dorsal crest on basal segment and minute crests on second and third segments. Posterior tibiae hairy on dorsum. Neuration normal.

*nodyna*, Turn.

9. Gen. MOLVENA, Wlk.

Frons with truncate conical prominence, at its apex a small circular depression. Palpi short, porrect; second joint smooth; terminal joint minute. Thorax with a small posterior crest. Abdomen with a small dorsal crest on basal segment. Posterior tibiae hairy on dorsum. Forewings normal. Hindwings with cell  $\frac{1}{2}$ ; 8 anastomosing with cell at  $\frac{1}{4}$ . Allied to *Thalatha*.

*guttalis*, Wlk.

MOLVENA HIEROGLYPHICA, n. sp.

♂, 23 mm. Head white; lower margin of face and apex of frontal process blackish. Palpi blackish, apices white. Antennae fuscous. Thorax white; a median spot on tegulae and outer edge of patagia towards base blackish. Abdomen grey; basal crest and apical segments fuscous; tuft ochreous-whitish. Legs dark fuscous mixed with whitish. Forewings rather broadly triangular, costa gently arched, apex rectangular, termen bowed, only slightly oblique; white with

sharply defined black markings; a short median bar from base; a transverse bar from costa at  $\frac{1}{8}$  nearly touching the preceding; a bar from costa before middle narrowing in cell, and bent forward in a right angle to posterior end of cell, a costal dot at  $\frac{2}{3}$ ; a triangular mark on mid-dorsum; an oblique quadrangular elongate bar from tornus; an irregular blotch at apex; cilia white, on markings blackish. Hindwings with termen rounded; white; an apical fuscous blotch; cilia white, on apex fuscous.

*Hab.*—Northern Queensland: Claudie River, in December; one specimen, taken by Mr. J. A. Kershaw. Type in National Museum, Melbourne.

#### 10. Gen. THALATHA, Wlk.

Frons with rounded prominence, at its apex a small circular depression. Palpi rather short, obliquely ascending; second joint with appressed hairs; terminal joint short. Thorax with a posterior crest. Abdomen with a small dorsal crest on basal segment. Posterior tibiae hairy on dorsum. Forewings normal. Hindwings with cell  $\frac{1}{2}$ ; 8 anastomosing with cell before  $\frac{1}{6}$ .

Hampson describes the thorax as without crests, but one is present in the Australian species.

*psorallina*, Low.

#### 11. Gen. ACRONYCTA, Ochs.

Tongue strong. Frons not projecting. Palpi long, ascending, exceeding vertex; second joint roughened anteriorly; terminal joint moderate or long. Thorax not crested. Abdomen with small dorsal crests on two basal segments, and lateral tufts on apical segments. Posterior tibiae hairy on dorsum. Forewings normal. Hindwings with cell over  $\frac{1}{2}$ .

*fasciata*, Moore. Hampson refers this to *Craniphora*, but it has only two abdominal crests, and that on second segment is minute. It agrees with *Acronycta*, except that the terminal joint of the palpi is unusually long (over  $\frac{1}{2}$ ).

#### ACRONYCTA PHAEOCOSMA, n. sp.

(*φαικοκοσμος*, with dusky ornament).

♂, ♀, 40 mm. Head and thorax dark fuscous, irrorated with whitish. Palpi whitish; second joint dark fuscous, except at base and apex; terminal joint short ( $\frac{1}{5}$ ). Antennae fuscous; in male simple. Abdomen fuscous mixed with whitish; legs fuscous, mixed with whitish; anterior and middle tibiae with two dark fuscous rings; tarsi whitish, annulated with dark fuscous. Forewings with



costa gently arched, apex rounded-rectangular, termen bowed, scarcely oblique; dark fuscous more or less irrorated with whitish, markings dark fuscous; a triangular basal spot; a dark suffusion on base of dorsum and several indistinct dark spots on basal part of costa; an indistinctly double finely-waved line from  $\frac{1}{3}$  costa to  $\frac{2}{5}$  dorsum; beyond this a whitish fascia containing a small orbicular, outlined with dark fuscous and with a central dot; an angular median line twice dentate outwards, triangularly thickened towards margins and between dentations; reniform rather large, slenderly outlined, with a fine central line, its posterior margin nearly straight, connected by a line with dorsum at  $\frac{2}{3}$ ; a finely dentate double posterior line from  $\frac{2}{3}$  costa, at first curved outwards, then inwards, towards dorsum, obscured by dark suffusion; a fine streak from median line along vein 2 nearly to termen; a whitish dentate subterminal line followed by some wedge-shaped spots; some small terminal dots; cilia whitish with dark-fuscous bars. Hindwings grey; a faintly darker postmedian line. Underside grey-whitish; both wings with dark-fuscous spot on costa before middle and postmedian line.

Allied to *A. fasciata*, but much darker, without basal streak on forewing, and terminal joint of palpi shorter.

*Hab.* — Queensland: Montville, Blackall Range (1,500 ft.), in March; two specimens.

## 12. Gen. CALOGRAMMA, Gn.

Frons not projecting. Palpi rather short, ascending; basal and second joints somewhat rough-haired, triangularly dilated; terminal joint short. Thorax with a small bifid posterior crest. Abdomen with dorsal crests on three basal segments. Posterior tibiae hairy on dorsum. Forewings normal. Hindwings with cell  $\frac{1}{2}$ ; discocellulars angled, 5 from below angle.

*festiva*, Don.

## 13. Gen. PRODENIA, Gn.

Frons not projecting. Palpi moderate, ascending, appressed to frons; second joint with loosely appressed hairs, slightly roughened anteriorly; terminal joint short. Thorax with small anterior and bifid posterior crest. Abdomen with dorsal crests on three basal segments. Posterior tibiae hairy on dorsum. Forewings normal. Hindwings with cell  $\frac{1}{2}$ ; discocellulars angled, 5 from below angle.

*litura*, Fab.

## 14. Gen. SPODOPTERA, Gn.

Frons not projecting. Palpi moderate or rather long, appressed to frons; second joint smooth-scaled, slightly



roughened anteriorly; terminal joint rather short. Thorax with a small posterior crest. Abdomen with a dorsal crest on basal segment. Posterior tibiae hairy on dorsum. Forewings normal. Hindwings with cell  $\frac{1}{2}$ ; discocellulars angled, 5 from below angle.

*Laphygma* is not tenable as a distinct genus; in *exigua* 3 and 4 of hindwings are usually stalked, but this is inconstant. No reliance can be placed on the less broadly hairy anterior tibiae, for there are intermediates in other species; still less in the slightly narrower forewings.

*umbraculata*, Wlk. *mauritica*, Bdv. *leucophlebia*, Hmps. The distribution of this species is curious, but it is certainly endemic in Australia. I have three examples, one from Melville Island, Northern Territory, and two from Brisbane. *exempta*, Wlk. *exigua*, Hb.

#### 15. Gen. THEGALEA, nov. (*θηγαλεος*, sharp).

Frons prominent, conical, with a large circular apical depression with raised edges, in its centre an acute corneous process. Palpi rather long, slender, porrect; second joint shortly rough-scaled; terminal joint rather long. Thorax with a small posterior crest. Abdomen with a small dorsal crest on basal segment. Posterior tibiae smooth. Forewings normal. Hindwings with 5 from shortly above lower angle of cell ( $\frac{1}{6}$ ).

*haemmorhanta*, Turn.

#### 16. Gen. HYPOPERIGEA, Hmps.

Frons with rounded prominence. Palpi moderate, ascending; second joint rough-haired; terminal joint moderately short. Thorax with a small posterior crest. Abdomen with a dorsal crest on basal segment, and sometimes a small crest on second segment. Posterior tibiae hairy on dorsum. Forewings normal. Hindwings with cell  $\frac{1}{2}$ ; 5 from well below middle ( $\frac{1}{4}$ ).

*tonsa*, Gn. This species varies in the development of reddish scales on forewings; they may be absent.

#### 17. Gen. NAMANGANA, Stgr.

Frons not projecting. Palpi moderate or rather long, ascending; second joint rough-haired; terminal joint short or rather long, porrect. Thorax with rounded anterior and small posterior crests. Abdomen with dorsal crest on basal segment. Posterior tibiae hairy. Neuration normal.

† *minor*, Butl. † *albirena*, Hmps.

## NAMANGANA DELOGRAPHA, n. sp.

(δηλογραφος, clearly engraved).

♂, 36 mm. Head and thorax ochreous-whitish, irrorated with dark fuscous. Palpi rather long (2); ochreous-whitish irrorated with dark fuscous. Antennae whitish finely barred with fuscous; in male simple, minutely ciliated, with slightly longer bristles. Abdomen whitish, irrorated with grey. Legs fuscous irrorated, and tibiae and tarsi annulated with ochreous-whitish. Forewings elongate-triangular, costa nearly straight, apex round-pointed, termen slightly bowed, slightly oblique; fuscous irrorated with whitish so as to appear grey, and with some pale-ochreous scales, especially on fold, and on a median streak posterior to reniform; markings whitish partly outlined with fuscous; sub-basal line indicated by costal and subcostal spots; antemedian at  $\frac{1}{4}$ , transverse, interrupted; orbicular circular with a dark central dot; reniform 8-shaped with two included dark dots, incomplete beneath; several white dots on terminal third of costa; postmedian slender, sinuate; subterminal slender, indented in middle; a terminal series of blackish lunules preceded by whitish; cilia fuscous, apices barred with ochreous-whitish. Hindwings with termen rounded; white; a few fuscous scales on veins; cilia white with an interrupted fuscous line before middle. Underside whitish with fuscous irroration towards costa and termen; forewings on male with long whitish hairs on under-surface of cell.

A distinct and neatly-marked species. The palpi are long for this genus, but some other species approach it in this respect. Type in Coll. Goldfinch.

*Hab.*—New South Wales: Bourke; one male from the late Mr. Helms' collection. Western Australia: Dowerin; one female from Mr. L. J. Newman.

## 18. Gen. LUPERINA, Bdv.

Frons not projecting. Palpi long, obliquely ascending; second joint with rough hairs anteriorly and also posteriorly at apex; terminal joint long, correct. Thorax with rounded anterior and small posterior crest. Abdomen without crests. Posterior tibiae hairy. Neuration normal.

Allied to *Namangana*, from which it differs in the absence of basal abdominal crest, but agrees in the structure of the palpi. The European *L. testacea*, Schiff., which is nearly allied to the type, has the tongue rather short and weak, and the thorax clothed with hairs. In these respects it differs from the following species, but they are hardly sufficient for generic distinction.

*horologa*, Meyr.

## 19. Gen. PHAEOPYRA, Hmps.

Frons not projecting. Palpi long, ascending; second joint roughened anteriorly; terminal joint moderate. Thorax with rounded anterior and bifid posterior crests. Abdomen with a dorsal crest on basal segment. Posterior tibiae hairy on dorsum. Neuration normal.

*chloëropis*, Turn. *smaragdists*, Hmps.

## 20. Gen. PHAEOMORPHA, nov.

(*φαιομορφος*, of dusky appearance).

Frons not projecting. Palpi moderately long, ascending, appressed to frons; second joint with appressed scales; terminal joint moderate. Thorax with rounded anterior and dense posterior crest. Abdomen not crested. Posterior tibiae hairy. Neuration normal.

Near *Phaeopyra*, from which it differs in the absence of basal abdominal crest.

PHAEOMORPHA ACINETA, n. sp. (*ἀκίνητος*, sluggish).

♂, ♀, 35-40 mm. Head whitish, irrorated with dark fuscous, back of crown whitish-ochreous. Palpi ochreous-whitish, irrorated with dark fuscous. Antennae fuscous; in male with short ciliations ( $\frac{1}{3}$ ) and longer bristles ( $\frac{2}{3}$ ). Thorax, anterior half pale-brownish, posterior half grey. Abdomen dark grey. Legs fuscous; anterior and middle tibiae with median and apical whitish-ochreous rings; tarsi reddish-tinged with dark-fuscous annulations. Forewings with costa nearly straight, apex rounded-rectangular, termen straight, not oblique, rounded towards tornus; grey with grey-whitish suffusion, markings fuscous; a line from costa near base to fold; a number of short strigulae on costa; claviform represented by a fuscous mark; orbicular faintly indicated; reniform better marked, narrow, with a central line, preceded and followed by a dark dot; a very fine postmedian line, at first finely dentate, then bent inwards in a curve to  $\frac{3}{4}$  dorsum; an indistinct pale subterminal line; a terminal series of dark pale-edged dots; cilia dark grey with whitish points. Hindwings fuscous becoming grey towards base; cilia white with a sub-basal fuscous line not extending to tornus. Underside of forewings fuscous; of hindwings whitish with broad blackish terminal band.

*Hab.*—Queensland: Montville, Blackall Range (1,500 ft.), in March; two specimens.

## 21. Gen. SESAMIA, Gn.

Frons not projecting. Tongue very weak or absent. Palpi moderate or short, slender, ascending; second joint

shortly rough-haired; terminal joint short. Thorax covered with long loose hairs, not crested. Abdomen without crests. Posterior tibiae hairy on dorsum. Forewings normal. Hindwings with cell over  $\frac{1}{2}$ ; 5 from slightly below middle ( $\frac{2}{5}$ ).

*exanimis*, Meyr. *brunnea*, Hmps. † *albicostata*, Low.

## 22. Gen. BATHYTRICHA, nov. (*βαθυτριχος*, with thick hair).

Frons not projecting, covered with rough hairs. Antennae of male bipectinated to apex. Tongue absent. Palpi moderate, obliquely ascending; second joint shortly rough-haired above and beneath; terminal joint long. Thorax densely hairy, without crests. Abdomen not crested. Posterior tibiae hairy. Forewings normal. Hindwings with cell  $\frac{1}{2}$ ; 5 from slightly below middle ( $\frac{2}{5}$ ).

*truncata*, Wlk. This cannot be referred to *Phragmatiphila*, Hmps., better known as *Nonagria*, although it is allied, because it has no frontal projection. I have not seen the type of that genus, but in *typhae* the tongue appears sufficiently strongly developed.

## 23. Gen. LOPHOCALAMA, Hmps.

I have not been able to examine this genus, but it seems sufficiently distinct. The tongue is fully developed; thorax with a triangular anterior and double posterior crest; abdomen without crest.

† *neuritis*, Hmps.

## 24. Gen. PERIPYRA, Hmps.

Frons not projecting. Palpi moderate, ascending; second joint rough-scaled anteriorly, and with a small posterior terminal tuft; terminal joint rather long. Thorax with a small undivided posterior crest. Abdomen hairy, without crests, but with dense lateral tufts of hair. Posterior tibiae hairy. Neuration normal.

Allied to the New Zealand *Bityla* and the European *Amphipyra*, though the abdomen is less flattened; but this is in any case an unsatisfactory character. It agrees with them in the lateral abdominal tufts, but differs in the small, acute, posterior, thoracic crest.

*sanguinipuncta*, Gn.

[Hampson refers † *atronitens*, Wlk., to the genus *Amphipyra*, but as the Australian locality requires confirmation, I have omitted it.]

## 25. Gen. DIPLONEPHRA, nov.

(διπλονεφρος, with doubled kidneys).

Frons not projecting. Palpi short, porrect; second joint rough-scaled; terminal joint very short. Thorax with a dense posterior crest. Abdomen hairy but without crests. Posterior tibiae hairy on dorsum. Neuration normal.

*ditata*, Luc.

## 26. Gen. CHASMINA, Wlk.

Frons not projecting. Palpi moderate, ascending, appressed to frons; second joint smooth; terminal joint moderate. Thorax not crested. Abdomen smooth, with dorsal crest on basal segment, or sometimes (*pulchra*) on first two segments. Posterior tibiae hairy on dorsum. Forewings normal. Hindwings with cell from about  $\frac{1}{2}$ ; 5 from below middle ( $\frac{1}{3}$  or  $\frac{1}{4}$ ).

*tibialis*, Fab. *tenuilinea*, Hmps. *pulchra*, Wlk.

## 27. Gen. CALLYNA, Gn.

Frons not projecting. Palpi rather long, ascending, appressed to frons; second joint smooth; terminal joint rather long. Thorax and abdomen without crests. Posterior tibiae hairy on dorsum. Forewings normal. Hindwings with 5 from below middle ( $\frac{1}{3}$ ). Allied to *Chasmina*.

*leuconota*, Low. *monoleuca*, Wlk. *leucosticha*, Turn.: Ann. Q'land Mus., x., p. 69 (1911).

## 28. Gen. PAROMPHALE, Hmps.

Frons forming a truncate conical prominence with a minute depression at apex. Palpi moderately long, obliquely ascending; second joint with loosely appressed scales; terminal joint short. Thorax with a small posterior crest. Abdomen without crests. Posterior tibiae smooth. Forewings normal. Hindwings with cell over  $\frac{1}{2}$ ; 3 and 4 sometimes short-stalked, 8 anastomosing with cell at  $\frac{1}{4}$ .

*caeca*, Swin. *pinodes*, Turn. This is referable here, though Hampson places it in the genus *Scotostena* among the Erastrinae.

## 29. Gen. ECCLETA, Turn.

Frons with an acute projection at lower edge. Palpi long, ascending, appressed to frons, exceeding vertex; second joint with loosely appressed scales; terminal joint long. Thorax with a posterior crest. Abdomen without crests. Posterior tibiae smooth with a few hairs on dorsum opposite median spurs and at apex. Forewings normal. Hindwings with cell  $\frac{1}{2}$ .

*xuthophanes*, Turn.



## 30. Gen. AUCHA, Wlk.

Frons forming a rounded projection. Palpi rather long, ascending, appressed to frons, exceeding vertex; second joint smooth; terminal joint rather long. Thorax with a smooth-scaled posterior crest. Abdomen not crested. Posterior tibiae smooth with a few hairs on dorsum opposite median spurs and at apex. Forewings normal. Hindwings with cell  $\frac{1}{2}$ ; 8 anastomosing with cell at  $\frac{1}{4}$ .

*triphaenoides*, Wlk. *vesta*, Swin.

## 31. Gen. EREMOCHROA, Meyr.

Frons forming a truncate conical prominence, at its apex a small circular depression with raised edges. Tongue absent. Antennae of male bipectinated to apex. Palpi rather long, correct; second joint with loose hairs above and beneath; terminal joint hairy, rather short. Thorax with a posterior crest. Abdomen without crests. Posterior tibiae hairy on dorsum. Forewings normal. Hindwings with cell over  $\frac{1}{2}$ ; 5 from slightly above middle.

† *psammias*, Meyr. † *thermidora*, Hmps. *macropa*, Low. † *paradesma*, Low. *alphitias*, Meyr.

## 32. Gen. MICROPIA, Hmps.

I have not examined this genus. Like *Eremochroa* it has the tongue aborted, but the frons forms a rounded prominence, and the tibiae are smooth.

† *rhodocentra*, Low.

## 33. Gen. PROMETOPUS, Gn.

Frons with a strong truncate conical projection. Palpi long, obliquely ascending; second joint with loose spreading hairs above and beneath; terminal joint long, correct. Thorax with a posterior crest. Abdomen not crested. Posterior tibiae hairy on dorsum. Forewings without areole, 7, 8, 9, 10 stalked. Hindwings with cell over  $\frac{1}{2}$ ; 5 from below middle ( $\frac{1}{3}$ ).

The following species stands alone in the Australian fauna. The other two Australian species referred to this genus by Hampson have the areole normally developed.

*inassueta*, Gn.

## 34. Gen. CALOPHASIDIA, Hmps.

I have not examined this genus. It is sufficiently distinguished by the hook on anterior tibiae.

† *lucala*, Swin. † *radiata*, Swin. † *dentifera*, Hmps.

## 35. Gen. AZENIA, Grote.

Allied to *Aegle*, but differing in the weak obsolescent tongue.

† *tusa*, Swin. † *pura*, Swin.

## 36. Gen. AEGLE, Hb.

Frons projecting with a large apical depression with raised edges, from its centre an acute, vertically-flattened, bilobed, corneous process. Palpi short, ascending; second joint rough-scaled anteriorly; terminal joint short. Thorax and abdomen without crests. Posterior tibiae smooth. Forewings normal. Hindwings with cell  $\frac{3}{5}$ ; 5 from slightly below middle ( $\frac{2}{5}$ ).

*hedychroa*, Turn.

## 37. Gen. OMPHALETIS, Hmps.

Frons projecting, containing a large apical depression with raised edges, in the centre of this a pointed or truncate corneous process. Palpi moderate, obliquely ascending; middle joint slightly roughened; terminal joint short. Thorax without crests or sometimes with a rudimentary double posterior crest. Abdomen not crested. Posterior tibiae hairy on dorsum. Neurulation normal.

*florescens*, Wlk. *heliosema*, Low. *nuna*, Gn. *melo-*  
*dora*, Low. *metaneura*, Hmps. † *sarcomorpha*, Low.  
† *petrodora*, Low.

38. Gen. DINOPRORA, nov. (*δινοπρωρος*, with rounded prow).

Frons forming a strong rounded prominence. Palpi moderate, obliquely ascending; second joint slightly roughened; terminal joint short. Thorax and abdomen not crested. Posterior tibiae hairy on dorsum. Neurulation normal.

*endesma*, Low.; type. *xerampelina*, Turn. *plinthina*, Turn.

## 39. Gen. RADINOGOËS, Butl.

Frons not projecting. Palpi moderate, ascending; second joint smooth; terminal joint short. Thorax and abdomen not crested. Posterior tibiae smooth. Forewings normal. Hindwings with cell over  $\frac{1}{2}$ .

Distinguished by the smooth palpi and posterior tibiae. I should have adopted the name *Proxenus*, H-Sch., if Hampson had not figured the type with hairy posterior tibiae.

*tenuis*, Butl.

## 40. Gen. LEUCOCOSMIA, Butl.

Frons not projecting, in male a cleft corneous ridge on vertex covered with scales. Palpi rather long, ascending,

appressed to frons, reaching vertex; second joint smooth, but rough on anterior edge, strongly dilated anteriorly towards apex; terminal joint short. Thorax not crested. Abdomen hairy, more so in male, without crests. Posterior tibiae hairy on dorsum. Forewings normal. Hindwings with cell over  $\frac{1}{2}$ ; 5 from well below middle ( $\frac{1}{3}$ ).

Apart from the peculiar male characters this genus is sufficiently distinguished by the palpi combined with the origin of vein 5 of hindwings.

*reclusa*, Wlk.

#### 41. Gen. CARADRINA, Ochs.

Frons not projecting. Palpi moderate, ascending; second joint slightly roughened anteriorly; terminal joint short. Thorax not crested, or with very slight rudiments only of crests. Abdomen without crests. Posterior tibiae hairy on dorsum. Neuration normal.

As thus defined this is undoubtedly a very large and cosmopolitan genus, but I do not see any safe way of dividing it. Hampson for some unexplained reason has dropped the name *Caradrina*, and substituted for it *Athetis*, Hb., characterized by the presence of an anterior thoracic crest. Of this I can find no trace in the two Australian species *obtusa* and *maculatra*, though a rudiment of it may be found in some extra-Australian species, to which they appear allied. The great majority of those given beneath he ascribes to *Ariathisa*, Wlk., characterized by small paired posterior thoracic crests. These are sometimes present in a rudimentary form, but if I had to rely on them for a criterion I should have to exclude many species from the genus, and concerning others I should be in doubt. I conclude that they cannot be depended on for generic definition.

*obtusa*, Hmps. *maculatra*, Low. *passalota*, Turn. *exundans*, Gn. † *ochroleuca*, Low. *pelosticta*, Low. † *cornuta*, Low. † *euchroa*, Low. † *angasi*, Feld. *amathodes*, Turn. *tortisigna*, Wlk.; of this *chrysospila*, Low., is a synonym. † *paragypsa*, Low. † *gypsina*, Low. *paratorna*, Low. † *chionopasta*, Hmps. *cyanoloma*, Low. *callimera*, Low. † *etoniana*, Low. *hydraecioides*, Gn. *marginalis*, Wlk. *microspila*, Low. † *atmoscopa*, Low. *confinis*, Wlk.; of this I think *basisticha*, Turn., and *nycteris*, Turn., are synonyms. *poliocrossa*, Turn. *porphyrescens*, Low. *bistrigula*, Wlk. *capularis*, Gn. *atra*, Gn. † *microdes*, Low. † *atrisquamata*, Low. *cryphaea*, Turn. † *heterogama*, Low. *monochroa*, Low. † *adelphodes*, Low. *leucosticta*, Turn. † *interferens*, Wlk. *flexirena*, Wlk. † *adelopa*, Hmps. *acallis*, Turn. *melanographa*, Turn. *ophiosema*, Turn.:

Ann. Q'land Mus., x., p. 66 (1911). *ebenodes*, Turn.: *ib.*, p. 67. *celaenica*, Turn.: *ib.*, p. 68. *ochropepla*, Turn.: *ib.*, p. 68. *spilocrossa*, Turn.: Proc. Roy. Soc. Q'land, 1915, p. 22.

CARADRINA AUSTERA, n. sp. (ἀυστηρός, stern).

♀, 38-42 mm. Head fuscous. Palpi whitish, external surface of second joint, except apex, dark fuscous. Antennae fuscous. Thorax fuscous; tegulae pale grey [this character is probably inconstant]. Abdomen grey. Legs fuscous-grey; tibiae and tarsi annulated with whitish. Forewings elongate-triangular, costa nearly straight, apex rounded, termen scarcely oblique, rounded beneath; dark grey with some fuscous admixture, but without any brownish tinge; a double dentate sub-basal line from costa to fold, dark fuscous; a double dentate blackish line very distinct from  $\frac{1}{4}$  costa to mid-dorsum, angled outwards on fold, inwards beneath fold, thence oblique; a fine blackish streak on fold crossing this line; orbicular very small, circular, pale, slenderly outlined with blackish; reniform K-shaped, open above and beneath, produced at outer inferior angle, brownish-tinged, outlined with blackish, sometimes outer half whitish; a fine dentate blackish line from midcosta curved outwards and then inwards beneath reniform, angled inwards on fold, outwards beneath fold, ending on  $\frac{3}{4}$  dorsum; a dark-fuscous shade from costa before apex to tornus, sharply defined and dentate posteriorly, ill-defined, and giving off several short longitudinal blackish streaks anteriorly; a very slender interrupted blackish terminal line; cilia grey with a pale basal line. Hindwings with termen wavy; grey, towards base whitish; cilia whitish, at apex grey, and with a grey sub-basal line not reaching tornus. Underside of forewings grey with a fuscous dot on end of cell; of hindwings whitish with fuscous dot on end of cell, subcostal irroration, and apical blotch.

*Hab.*—Queensland: Brisbane, in April and May; two specimens.

#### 42. Gen. AMYNA, Gn.

Frons not projecting. Palpi moderate or rather long; upturned; second joint thickened with loosely appressed scales, rather rough anteriorly; terminal joint long. Thorax not crested. Abdomen with dorsal crests on two basal segments. Posterior tibiae with median and apical hair-tufts on dorsum. Forewings normal. Hindwings with 5 from below middle ( $\frac{1}{3}$ ).

*apicalis*, Wlk. *natalis*, Wlk. *octo*, Gn. † *sylonota*, Low. *punctum*, Fab. Northern Territory: Port Darwin; Northern Queensland: Atherton, Townsville.



## 43. Gen. ZALISSA, Wlk.

Frons not projecting. Palpi rather short, obliquely ascending; second joint rough-scaled; terminal joint short. Thorax with a small posterior crest. Abdomen not crested. Posterior tibiae hairy. Forewings normal. Hindwings with branched median vein present in cell; otherwise normal.

*catocalina*, Wlk.

## 44. Gen. LEUCOGONIA, Hmps.

Frons with a short conical prominence. Palpi long, porrect; second joint shortly rough-haired; terminal joint long. Thorax with a small posterior crest. Abdomen hairy, with a small dorsal crest on basal segment. Posterior tibiae hairy on dorsum. Neuration normal.

*ekeikei*, B-Bak. The name selected by Mr. Bethune-Baker for this fine species grieves me.

## 45. Gen. METAXANTHIA, Hmps.

Frons with rounded prominence. Palpi moderate, porrect or slightly ascending; second joint triangularly dilated with loose hairs towards apex; terminal joint very short, concealed. Thorax with a small posterior crest. Abdomen with a dorsal crest on basal segment. Posterior tibiae slightly hairy on dorsum. Neuration normal.

*cosmopis*, Low.

## Subfam. ERASTRIANAE.

Sir George Hampson has felt some difficulty in distinguishing this subfamily from the Acronyctinae, for he remarks that some genera have the typical trifold neuration of the latter, and makes the abortion of the anterior prolegs of the larvae the essential distinction. As in the majority of cases the larvae are unknown this distinction is not only inapplicable in practice, but it is at present impossible to test its validity. Doubtful cases must therefore be decided by considerations of apparent affinity, and I have therefore included here *Micrapatetis* and *Xenospeustis*. The Erastrianæ seem to be an intermediate and transitional group, and probably their distinction from the Noctuinae will be equally difficult.

- |   |     |                        |
|---|-----|------------------------|
| 1. Forewings without areole ... ..            | 2.  |                        |
| Forewings with areole present ... ..          | 19. |                        |
| 2. Forewings with 7, 8, 9, 10, 11 stalked ... | 1.  | <i>Aracoptera</i>      |
| Forewings with these veins not all stalked    | 3.  |                        |
| 3. Forewings with 7, 8, 9, 10 stalked ... ..  | 4.  |                        |
| Forewings with these veins not all stalked    | 10. |                        |
| 4. Forewings with 3 and 4 stalked ... ..      | 3.  | <i>Pseudocraspedia</i> |
| Forewings with 3 and 4 separate ... ..        | 5.  |                        |



- |   |                          |
|---|--------------------------|
| 5. Hindwings with 8 anastomosing with cell to near middle ... ..                        | 7. <i>Micrapatetis</i>   |
| Hindwings with 8 not anastomosing beyond $\frac{1}{4}$ ... ..                           | 6.                       |
| 6. Abdomen with dorsal series of crests ... ..  | 7.                       |
| Abdomen with only one or no crest ... ..  | 8.                       |
| 7. Palpi porrect, hairy above and beneath   | 4. <i>Peperita</i>       |
| Palpi upturned, appressed to frons ... ..   | 10. <i>Cophanta</i>      |
| 8. Abdomen with basal crest ... ..  | 9. <i>Himerois</i>       |
| Abdomen without crests ... ..   | 9.                       |
| 9. Frons with rounded prominence ... ..   | 11. <i>Narangodes</i>    |
| Frons without prominence, palpi slender   | 12. <i>Enispa</i>        |
| 10. Forewings with 8, 9, 10 stalked, 7 separate   | 11.                      |
| Forewings with 10 separate, 7, 8, 9 stalked, or 7, 8 stalked, 9 absent ... ..           | 17.                      |
| 11. Abdomen with dorsal crest on basal segment ... ..                                   | 12.                      |
| Abdomen without crests ... ..   | 14.                      |
| 12. Thorax with a posterior crest ... ..  | 15. <i>Pyripnoa</i>      |
| Thorax not crested ... ..   | 13.                      |
| 13. Frons with a rounded prominence ... ..  | 16. <i>Euthytoma</i>     |
| Frons not projecting ... ..   | 17. <i>Ozarba</i>        |
| 14. Hindwings with 6 and 7 stalked ... ..   | 2. <i>Trissernis</i>     |
| Hindwings with 6 and 7 not stalked ... ..   | 15.                      |
| 15. Thorax with a posterior crest ... ..  | 18. <i>Haplopseustis</i> |
| Thorax not crested ... ..   | 16.                      |
| 16. Palpi obliquely porrect, second joint with subapical tuft of hairs on upper surface | 13. <i>Catoblemma</i>    |
| Palpi upturned, appressed to frons ... ..   | 14. <i>Eublemma</i>      |
| 17. Forewings with 9 absent ... ..  | 5. <i>Decticroptis</i>   |
| Forewings with 9 present ... ..   | 18.                      |
| 18. Hindwings with 8 anastomosing with cell to near middle ... ..                       | 8. <i>Xenopseustis</i>   |
| Hindwings with 8 anastomosing near base only ... ..                                     | 6. <i>Holocryptis</i>    |
| 19. Forewings with 10 connate or stalked from areole ... ..                             | 20.                      |
| Forewings with 10 arising separately from areole ... ..                                 | 23.                      |
| 20. Frons with a pointed prominence ... ..  | 22. <i>Trogatha</i>      |
| Frons not projecting ... ..   | 21.                      |
| 21. Abdomen with dorsal crest on basal segment ... ..                                   | 19. <i>Metasada</i>      |
| Abdomen without crests ... ..   | 22.                      |
| 22. Hindwings with cell not over $\frac{1}{3}$ ... ..                                   | 20. <i>Carmara</i>       |
| Hindwings with cell about $\frac{1}{2}$ ... ..  | 25. <i>Callipyris</i>    |
| 23. Frons not projecting ... ..   | 24.                      |
| Frons prominent ... ..  | 33.                      |
| 24. Abdomen not crested ... ..  | 25.                      |
| Abdomen with one or more dorsal crests  | 29.                      |
| 25. Palpi with an apical tuft on posterior surface of second joint ... ..               | 26.                      |
| Palpi without apical tuft on second joint   | 28.                      |
| 26. Posterior tibiae smooth ... ..  | 27.                      |
| Posterior tibiae hairy on dorsum ... ..   | 26. <i>Corgatha</i>      |
| 27. Hindwings with cell $\frac{1}{2}$ ... ..  | 21. <i>Cerynea</i>       |
| Hindwings with cell $\frac{1}{2}$ ... ..  | 27. <i>Hyposada</i>      |

- |   |                        |
|---|------------------------|
| 28. Hindwings with cell $\frac{1}{2}$ ... ..                        | 29. <i>Oruza</i>       |
| Hindwings with cell $\frac{1}{2}$ ... ..                            | 31. <i>Eucolastra</i>  |
| Hindwings with cell $\frac{2}{3}$ ... ..                            | 32. <i>Mimasura</i>    |
| 29. Abdomen with dorsal crest on basal segment only ... ..          | 30.                    |
| Abdomen with dorsal crests on other than basal segment ... ..       | 31.                    |
| 30. Palpi with a small posterior apical tuft on second joint ... .. | 28. <i>Hypobleta</i>   |
| Palpi without apical tuft on second joint ... ..                    | 33. <i>Eustrotia</i>   |
| 31. Thorax not crested ... ..                                       | 30. <i>Lophoruza</i>   |
| Thorax with a posterior crest ... ..                                | 32.                    |
| 32. Hindwings with 3 and 4 stalked ... ..                           | 31. <i>Maliattha</i>   |
| Hindwings with 3 and 4 not stalked ... ..                           | 35. <i>Lithacodia</i>  |
| 33. Frons with a transverse apical groove ... ..                    | 36. <i>Uncula</i>      |
| Frons without apical depression ... ..                              | 34.                    |
| 34. Hindwings with 6 and 7 stalked ... ..                           | 37. <i>Habrophyes</i>  |
| Hindwings with 6 and 7 connate ... ..                               | 35.                    |
| 35. Thorax not crested ... ..                                       | 36.                    |
| Thorax with a posterior crest ... ..                                | 39. <i>Tarache</i>     |
| 36. Hindwings with 8 anastomosing with cell to $\frac{1}{2}$ ... .. | 23. <i>Diplothecta</i> |
| Hindwings with 8 anastomosing with cell near base only ... ..       | 37.                    |
| 37. Palpi with terminal joint very short ... ..                     | 24. <i>Sophta</i>      |
| Palpi with terminal joint long ... ..                               | 38. <i>Epopsima</i>    |

### 1. Gen. ARAEOPTERA, Hmps.

Frons not projecting. Palpi moderate or long, upturned; second joint thickened with rough scales; terminal joint moderate or long. Thorax not crested. Abdomen without crests, or with minute crests on apical segments (*canescens*). Posterior tibiae smooth. Forewings without areole, 3 and 4 stalked, 7, 8, 9, 10, 11 stalked. Hindwings with 3 and 4 stalked, 5 from slightly below middle ( $\frac{2}{5}$ ), 6 and 7 stalked, 8 anastomosing with cell to  $\frac{1}{4}$ .

*micraeola*, Meyr. *epiphracta*, Turn. *pleurotypa*, Turn. *canescens*, Wlk.

### ARAEOPTERA MICROCLYTA, n. sp.

(*μικροκλυτος*, splendidly small).

♂, 10 mm. Head whitish; face with fine fuscous transverse lines. Palpi long, terminal joint long ( $\frac{2}{3}$ ); whitish, outer surface of second joint fuscous, terminal joint with a slender subapical fuscous ring. Antennae whitish, annulated with fuscous. Thorax whitish, with fuscous irroration. Abdomen whitish, on dorsum mixed with brown and irrorated with fuscous. Legs fuscous, annulated with whitish; posterior pair wholly whitish. Forewings rather narrow, costa gently arched, apex rounded, termen obliquely rounded; whitish, markings fuscous mixed with brown; a spot on base of costa;

a sub-basal fascia, followed by an inwardly oblique interrupted transverse line; brown spots on costa at  $\frac{1}{4}$ , middle, and  $\frac{3}{4}$ ; from middle costal spot a broad fuscous transverse fascia including a whitish spot on dorsum, its posterior edge angled outwards in middle; from third spot an outwardly curved line ending in a fuscous spot on dorsum before tornus; a well-defined slender whitish line defines this posteriorly, strongly dentate above tornus; apical area mostly fuscous; a terminal series of fuscous dots separated by brown dots; cilia fuscous with whitish spots. Hindwings with termen nearly straight; as forewings but with fascia before middle leaving median area whitish, subterminal whitish line broader.

Very like *A. micraeola*, Meyr., but darker and readily distinguished by the longer terminal joint of palpi; in *micraeola* this is less than  $\frac{1}{2}$ .

*Hab.*—Northern Queensland: Kuranda, near Cairns, in October: one specimen received from Mr. F. P. Dodd.

## 2. Gen. TRISSERNIS, Meyr.

Frons not projecting. Palpi moderate, porrect or ascending; second joint more or less roughened anteriorly; terminal joint short. Thorax and abdomen without crests. Posterior tibiae smooth. Forewings without areole, 8, 9, 10 stalked. Hindwings with 5 from slightly below middle ( $\frac{2}{3}$ ), 6 and 7 stalked, 8 anastomosing with cell to  $\frac{1}{4}$ .

*prasinoscia*, Meyr. *ochrochlora*, Turn. Best distinguished from the preceding by the palpi, which are porrect rather than ascending, and with the second joint less roughened.

## 3. Gen. PSEUDOCRASPEDIA, Hmps.

Frons not projecting. Palpi slender, ascending; second joint slightly roughened anteriorly; terminal joint short. Thorax not crested. Abdomen with a series of small dorsal crests. Posterior tibiae smooth. Forewings without areole, 3 and 4 stalked, 7, 8, 9, 10 stalked. Hindwings with 5 from slightly below middle ( $\frac{2}{3}$ ), 6 and 7 stalked, 8 anastomosing with cell to  $\frac{1}{4}$ .

*punctata*, Hmps. *Hab.*—Northern Queensland: Townsville.

## 4. Gen. PEPERITA, Hmps.

Frons not projecting. Palpi moderately long, porrect; second joint hairy above and beneath; terminal joint minute. Thorax not crested. Abdomen with dorsal series of crests. Posterior tibiae hairy. Forewings without areole, 7, 8, 9, 10 stalked. Hindwings with 5 from slightly below middle ( $\frac{2}{3}$ ).

*molybdopasta*, Turn.

## 5. Gen. DECTICRYPTIS, Hmps.

Frons not projecting. Palpi very short, slender, porrect; second joint smooth; terminal joint porrect. Thorax and abdomen without crests. Posterior tibiae smooth. Forewings without areole, 7 and 8 stalked, 8 and 9 coincident. Hindwings with 3 and 4 stalked, 5 from well below middle ( $\frac{1}{4}$ ).

*deleta*, Moore. *Hab.*—Northern Queensland: Kuranda, near Cairns (F. P. Dodd).

## 6. Gen. HOLOCRYPTIS, Meyr.

Frons with rounded prominence. Palpi rather short, slender, obliquely ascending; second joint smooth; terminal joint moderate. Thorax not crested. Abdomen with small dorsal crests on third, fourth, and fifth segments. Posterior tibiae smooth. Forewings without areole, 7, 8, 9 stalked. Hindwings with 3 and 4 stalked, 5 from well below middle ( $\frac{1}{3}$ ), 6 and 7 stalked.

*phasianura*, Luc.

## 7. Gen. MICRAPATETIS, Meyr.

Frons with small rounded prominence. Palpi moderate, ascending; second joint thickened with rough scales; terminal joint short. Thorax with a small posterior crest. Abdomen without crests. Posterior tibiae smooth. Forewings without areole, 7, 8, 9, 10 stalked. Hindwings with 3 and 4 short-stalked, 5 from slightly below middle ( $\frac{2}{5}$ ), 6 and 7 stalked, 8 anastomosing with cell to near middle.

*tripartita*, Butl. *orthozona*, Meyr. The two sexes are alike. *leucozona*, Turn. *glycychoa*, Turn. † *purpurascens*, Hmps. † *albiviata*, Hmps.

## MICRAPATETIS ICELA, n. sp. (είκελος, similar).

♀, 16 mm. Head ochreous. Palpi fuscous, apices ochreous. Antennae fuscous. Thorax dark fuscous with an anterior ochreous spot in tegulae, apices of patagia and a posterior spot whitish-ochreous. Abdomen fuscous. Legs fuscous; posterior pair whitish-ochreous. Forewings triangular, costa moderately arched, apex round-pointed, termen slightly bowed, slightly oblique; whitish-ochreous, markings dark fuscous; a basal costal streak attenuating to a point at  $\frac{1}{3}$ ; a postmedian fascia, its anterior edge convex, wavy, from midcosta to  $\frac{3}{5}$  dorsum, its posterior edge concave, wavy, from  $\frac{3}{4}$  costa to  $\frac{4}{5}$  dorsum; a moderate terminal fascia, angled and shortly produced inwards above middle; cilia dark fuscous. Hindwings with termen slightly sinuate; fuscous; cilia fuscous.

Closely allied to the two preceding species, but certainly distinct. The costal streak is twice as long, the fascia narrower, postmedian, and curved slightly outwards towards dorsum. It appears to be a native of the interior.

*Hab.*—Queensland: Adavale, in April; one specimen.

#### 8. Gen. XENOPSEUSTIS, Meyr.

I have not examined this genus, but it is probably allied to the preceding.

† *poecilastis*, Meyr.

#### 9. Gen. HIMEROIS, Turn.

Frons with slight rounded prominence. Palpi moderate or rather short, upturned; second joint with appressed hairs; terminal joint moderate or rather long. Thorax not crested. Abdomen with a smooth dorsal crest on basal segment. Posterior tibiae smooth. Forewings without areole, 7, 8, 9, 10 stalked. Hindwings with 3 and 4 short-stalked, 5 from slightly below middle ( $\frac{2}{5}$ ), 6 and 7 stalked.

*thiochroa*, Turn.

HIMEROIS PERIPHAEA, n. sp. (περιφαιος, dusky-edged).

♂, 14 mm. Head, palpi, thorax, and abdomen yellow. Antennae pale fuscous; ciliations in male minute. Legs ochreous with some fuscous irroration. Forewings elongate-triangular, costa nearly straight, apex round-pointed, termen slightly bowed, slightly oblique; yellow; a moderate dark-fuscous terminal fascia, broadest in middle, its edge irregularly denticulate; cilia dark fuscous. Hindwings with termen slightly sinuate; fuscous; cilia fuscous.

*Hab.*—Northern Territory: Port Darwin, in October; two specimens, received from Mr. F. P. Dodd.

#### 10. Gen. COPHANTA, Wlk.

Frons not projecting. Palpi moderate, upturned, appressed to frons; second joint much thickened, with appressed hairs; terminal joint moderate. Thorax with a posterior crest. Abdomen with dorsal crests, those on third and fourth segments large. Posterior tibiae smooth. Forewings without areole, 7, 8, 9, 10 stalked. Hindwings with 3 and 4 connate or short-stalked, 5 from slightly below middle ( $\frac{2}{5}$ ), 6 and 7 stalked.

*funestalis*, Wlk.

#### 11. Gen. NARANGODES, Hmps.

Frons with rounded prominence. Palpi rather short, upturned; second joint rough-scaled anteriorly; terminal



joint very short. Thorax and abdomen without crests. Posterior tibiae smooth. Forewings without areole, 7, 8, 9, 10 stalked. Hindwings with 3 and 4 connate or stalked, 5 from slightly below middle ( $\frac{2}{5}$ ), 6 and 7 stalked.

*nigridiscata*, Swin.

## 12. Gen. ENISPA, Wlk.

Frons not projecting. Palpi moderate or rather short, porrect or obliquely ascending, slender; terminal joint minute. Thorax and abdomen not crested. Posterior tibiae smooth or slightly hairy. Forewings without areole, 7, 8, 9, 10 stalked. Hindwings with 5 from much below middle ( $\frac{1}{4}$ ), 8 anastomosing with cell near base or to  $\frac{1}{4}$ .

*prolecta*, Turn. *plutonis*, Luc. *niveiceps*, Turn. *violacea*, Luc. This differs from the Ceylon species *oblatoria*, Wlk., in the semilunar discal mark on forewings and absence of pale dentate lines.

## 13. Gen. CATOBLEMMMA, Hmps.

Frons not projecting, but with a small anterior tuft of scales. Palpi long, obliquely porrect; second joint thickened with appressed scales and with a subapical tuft of hairs on upper surface. Thorax and abdomen without crests. Posterior tibiae with long hairs on dorsum. Forewings without areole, 8, 9, 10 stalked. Hindwings with 5 from much below middle ( $\frac{1}{5}$ ).

Allied to *Eublemma*, but with different palpi.

*aplecta*, Turn. *dubia*, Butl. *digona*, Hmps.

CATOBLEMMMA ADIAPHORA, n. sp. (*ἀδιαφορος*, indifferent).

♀, 12 mm. Head white. Palpi in female 3; pale fuscous. Antennae whitish. Thorax whitish-grey; tegulae white. Abdomen whitish-grey. Legs whitish. Forewings triangular, costa straight, apex acute, slightly produced, termen bowed, oblique; whitish-grey; antemedian line from  $\frac{1}{3}$  costa to  $\frac{1}{3}$  dorsum, outwardly curved, blackish, forming the inner edge of a large quadrangular blackish blotch, which extends to mid-dorsum and to above middle of disc; an incomplete blackish discal ring above middle; postmedian line from  $\frac{2}{3}$  costa, at first outwardly oblique, then transverse in disc, bent inwards beneath cell, then downwards to  $\frac{3}{4}$  dorsum, very slender and pale grey, but blackish towards costa: a slight fuscous subapical costal suffusion; cilia whitish-grey. Hindwings with termen rounded; whitish-grey; cilia whitish-grey.

*Hab.*—Northern Territory: Port Darwin, in November; one specimen, received from Mr. F. P. Dodd.

CATOBLEMMMA ANAEMACTA, n. sp. (ἀναιμακτος, bloodless, pale).

♀, 18-24 mm. Head, thorax, and abdomen whitish. Palpi 3; whitish. Antennae whitish. Legs whitish; anterior pair with some pale-fuscous irroration. Forewings triangular, costa nearly straight, but slightly sinuate towards base and before apex, apex tolerably acute, termen bowed, moderately oblique; whitish, with sometimes a few fuscous scales near costa; lines very pale grey; antemedian very faint or obsolete, from  $\frac{1}{3}$  costa to  $\frac{1}{3}$  dorsum, angled outwards on fold, inwards on vein 1; discal spot obsolete; postmedian faint, double, or only the outer line developed, from  $\frac{2}{3}$  costa obliquely outwards, curved outwards in disc, slightly angled inwards on fold, ending on  $\frac{3}{4}$  dorsum; a subterminal line of fuscous dots ending in a short subapical oblique streak more or less developed; cilia whitish. Hindwings with termen rounded; whitish; cilia whitish.

*Hab.*—Northern Territory: Port Darwin, in December. Victoria: Murtoa, in February. Two specimens. This is a widely distributed species, which may not be uncommon when its habits are known.

CATOBLEMMMA ACROSTICHA, n. sp.

(ἀκροστιχος, with apical streak).

♂, 18 mm. Head whitish. Palpi in male 2; pale fuscous. Antennae whitish; in male serrate, ciliations minute ( $\frac{1}{5}$ ). Thorax whitish; tegulae ochreous-whitish. Abdomen and legs ochreous-whitish. Forewings triangular, costa straight, apex pointed, not produced, termen bowed, oblique; ochreous-whitish, towards costa whitish irrorated with fuscous; lines and discal spot obsolete; a short, oblique, blackish, subapical costal streak, giving rise to a short subterminal line of a few minute blackish dots; cilia ochreous-whitish. Hindwings rounded; ochreous-whitish; cilia ochreous-whitish.

This might be taken for one of the *dubia* group, but differs in the extremely short male antennal ciliations.

*Hab.*—Queensland: Gayndah; one specimen, received from Dr. Hamilton Kenny.

CATOBLEMMMA PORPHYRIS, n. sp. (πορφυρις, purple).

♂, ♀, 17-23 mm. Head and thorax rosy-purple mixed with whitish. Palpi long, male 3, female 4; rosy-purple. Antennae whitish-ochreous; ciliations in male  $1\frac{1}{2}$ . Abdomen whitish. Legs whitish mixed with rosy-purple; posterior pair wholly whitish. Forewings elongate-triangular, costa straight, apex acute, slightly produced, termen bowed,

moderately oblique; rosy-purple; a darker postmedian discal spot scarcely indicated; a fine, short, inwardly-oblique, blackish streak from costa just before apex, sometimes giving rise to a line of fuscous dots parallel to termen; cilia whitish-ochreous tinged except at tornus with rosy-purple, apices whitish. Hindwings with termen rounded; ochreous-brown, paler towards base; cilia as forewings. Allied to *Catoblemma dubia*.

*Hab.*—Northern Territory: Port Darwin; five specimens, received from Mr. G. F. Hill, with the note, "Larvae predaceous on large *Lecanium* on *Acacia*."

#### 14. Gen. EUBLEMMA, Hb.

Frons not projecting, without anterior tuft. Palpi moderate, upturned, more or less appressed to frons; second joint thickened with scales, rough anteriorly; terminal joint short or moderate. Thorax and abdomen without crests. Posterior tibiae smooth or hairy on dorsum. Forewings without areole, 8, 9, 10 stalked. Hindwings with 3 and 4 connate or stalked, 5 from well below middle ( $\frac{1}{3}$  to  $\frac{1}{4}$ ), 8 anastomosing with cell near base or to  $\frac{1}{4}$ .

A large genus with some variation in structure.

*pectorora*, Luc. *flavipars*, Hmps. *Hab.*—Northern Queensland: Cairns, Townsville. *dimidialis*, Fab. † *brunnea*, Hmps. *paurograpta*, Butl. † *pulvinariae*, Olliff. *glaucochroa*, Turn.: Proc. Linn. Soc. N.S. Wales, 1902, p. 116. *silicula*, Swin. *anachoresis*, Wlgrn. *cochylioides*, Gn. *roseana*, Moore. *parva*, Hb. *rivula*, Moore. *leucodesma*, Low. *lorostropha*, Turn. *rufipuncta*, Turn. *sphragidota*, Turn. *curvata*, Luc. *abrupta*, Wlk. *versicolor*, Wlk. *lorotoma*, Turn. *ragusana*, Freyer. *rubra*, Hmps. *vestalis*, Butl. *innocens*, Butl. *extorris*, Warr: Seitz Macrolep. d. Erde. *Hab.*—Northern Territory: Port Darwin.

EUBLEMMA IOPHAËNNA, n. sp. (*iophaervos*, violet-shining).

♂, 15 mm. Head and palpi ochreous. Antennae fuscous; ciliations in male long ( $2\frac{1}{2}$ ). Thorax fuscous. Abdomen and legs pale ochreous. Forewings triangular, costa nearly straight, apex round-pointed, termen bowed, slightly oblique; fuscous mixed with whitish scales showing violet reflections in oblique light; an indistinct slender pale sub-basal line; a similar line, more distinct, at  $\frac{1}{4}$ ; antemedian pale slender slightly outwardly curved from  $\frac{1}{3}$  costa to  $\frac{1}{3}$  dorsum; two blackish discal dots at and before middle; a pale median fascia, becoming whitish towards costa; postmedian line similarly whitish towards costa, defined anteriorly by a slender fuscous line from costa beyond middle, outwardly oblique,

then bent downwards and obscurely denticulate, bent inwards below cell, angled inwards on fold and vein 1, ending on mid-dorsum, towards dorsum preceded by an ochreous shade; a fine pale imperfectly-developed line closely following post-median; subterminal whitish, angled inwards above middle and on fold; a fine whitish submarginal line; cilia ochreous-whitish, suffused with fuscous opposite apex, mid-termen, and tornus. Hindwing with termen rounded; whitish-ochreous, apical half suffused almost wholly with fuscous; cilia whitish-ochreous.

Not near any other species so far as I know.

*Hab.*—Northern Queensland: Herberton, in February; one specimen, received from Mr. F. P. Dodd.

15. Gen. PYRIPNOA, nov. (*πυριπνοος*, fiery).

Frons not projecting. Palpi moderate, upturned, appressed to frons; second joint rough anteriorly, terminal joint rather long. Thorax with a posterior crest. Abdomen with a rough crest on basal segment. Posterior tibiae smooth with dorsal tufts of hair on middle and at apex. Forewings without areole, 8, 9, 10 stalked. Hindwings with 5 from well below middle ( $\frac{1}{4}$ ), 8 anastomosing with cell near base only.

Near *Ozarba*, differing in the posterior thoracic crest, and the shorter anastomosis of 8 of forewings.

*pyraspis*, Meyr.; type. *plumbipicta*, Hmps. *camptozona*, Turn.

16. Gen. EUTHYTOMA, nov. (*εὐθυτομος*, straightly divided).

Frons with rounded prominence. Palpi moderate, upturned; second joint thickened with rough scales; terminal joint moderate. Thorax not crested. Abdomen with a small dorsal crest on basal and sometimes also on second segment. Posterior tibiae smooth with a small median dorsal tuft of hairs. Forewings without areole, 8, 9, 10 stalked. Hindwings with cell over  $\frac{1}{2}$ ; 5 from near lower angle ( $\frac{1}{4}$ ).

Allied to *Eustrotia* and *Ozarba*. The loss of the areole is perhaps due to the separation of 7 from connection with 8, 9; 7 approaches the stalk of these veins rather nearly, in *Ozarba* they are more separate.

*opella*, Swin.

17. Gen. OZARBA, Wlk.

Frons not projecting. Palpi moderate, upturned, appressed to frons; second joint rough anteriorly; terminal joint long. Thorax not crested. Abdomen with a smooth crest on basal segment. Posterior tibiae smooth, with dorsal

tufts of hair on middle and at apex. Forewings without areole, 8, 9, 10 stalked. Hindwings with 5 from below middle ( $\frac{1}{3}$ ), 8 anastomosing with cell to  $\frac{1}{3}$ .

*punctigera*, Wlk. *chrysaspis*, Meyr. † *hemiplaca*, Meyr.

18. Gen. HAPLOPSEUSTIS, Meyr.: Trans. Ent. Soc.,  
1902, p. 34.

*Acuissa*, Turn.: Trans. Roy. Soc. S. Austr., 1902, p. 180.

Antennae bipectinate to apex in both sexes. Frons not projecting. Tongue present, weakly developed. Palpi moderate, ascending; second joint long, much thickened, with loosely appressed scales; terminal joint very short. Thorax with a large hairy posterior crest. Abdomen not crested. Posterior tibiae nearly smooth. Forewings without areole, 8, 9, 10 stalked. Hindwings with 5 from well above angle ( $\frac{1}{3}$ ), 8 anastomosing with cell at  $\frac{1}{4}$ .

The presence of a tongue and the basal anastomosis of 8 with the cell in the hindwings definitely place this genus in the Noctuidae, as was done by Mr. Meyrick, although the bipectination of antennae in both sexes gives it a deceptive resemblance to the Liparidae.

*erythrias*, Meyr.: Trans. Ent. Soc., 1902, p. 34; of this *pyrrhias*, Turn. (Trans. Roy. Soc. S. Austr., 1902, p. 180), is a synonym.

19. Gen. METASADA, Hmps.

Unfortunately I have no example of this genus to examine.

† *polycesta*, Turn.

20. Gen. CARMARA, Wlk.

Frons not projecting, but with an anterior tuft of scales. Palpi rather long, obliquely porrect; second joint long, thickened with loosely appressed hairs, expanded at apex, with a small apical tuft on upper surface; terminal joint minute. Thorax and abdomen without crests. Posterior tibiae slightly hairy. Forewings with 10 connate or stalked with 8, 9 from areole. Hindwings with cell very short ( $\frac{1}{3}$ ), 3 and 4 stalked, 5 from well below middle ( $\frac{1}{4}$ ).

*subcervina*, Wlk.

21. Gen. CERYNEA, Wlk.

Frons not projecting. Palpi long, ascending; second joint thickened with rough scales and with a posterior subapical tuft of hairs; terminal joint long. Thorax and abdomen without crests. Posterior tibiae smooth. Forewings normal.



Hindwings with cell  $\frac{1}{3}$ ; 3 and 4 short-stalked, 5 from much below middle ( $\frac{1}{4}$ ).

*trogobasis*, Hmps.

22. Gen. TROGATHA, Hmps.

Frons with a bluntly-pointed prominence. Palpi rather long, obliquely ascending; second joint long, smooth, with a small apical tuft on upper-surface; terminal joint minute. Thorax and abdomen without crests. Posterior tibiae somewhat hairy. Forewings with 8, 9, 10 stalked from areole. Hindwings with 5 from well below middle ( $\frac{1}{4}$ ).

A development of *Sophia*.

*pocilota*, Turn.

23. Gen. DIPLOTHECTA, nov. (*διπλοθηκτος*, twice sharpened).

Frons with a conical projection. Palpi long, porrect; second joint very long, thickened with rough scales above and beneath, greatly expanded towards apex; terminal joint moderate, stout, obtuse, slightly depressed. Antennae of male simple, minutely ciliated, with a longer bristle on each segment. Thorax and abdomen not crested. Forewings with 2 from  $\frac{3}{8}$ , 3, 4, 5 equidistant from near angle, areole present but small, 7, 8, 9 stalked from areole. Hindwings with 2 from  $\frac{3}{4}$ , 3, 4, 5 equidistant from near angle, 6, 7, connate, 8 anastomosing with cell from  $\frac{1}{4}$  to middle.

Allied to *Sophia*, Wlk., with which it agrees in the conical frons, shape of forewings, and small areole; but differs in the longer, porrect, much-dilated palpi, and in the long anastomosis of vein 8 of hindwings.

DIPLOTHECTA DIGONIA, n. sp. (*διγωνιος*, twice angled).

♂, 30 mm. Head whitish-ochreous. Palpi grey with a few dark-fuscos scales. Antennae grey. Thorax and abdomen ochreous-grey, with a few dark-fuscos scales. Legs greyish-ochreous. Forewings with costa strongly arched, apex acute, termen strongly angled on vein 4; grey sparsely irrorated with fuscous; two transverse lines whitish, edged with fuscous or brown; first from  $\frac{1}{4}$  costa to  $\frac{1}{3}$  dorsum, slightly outwardly-curved, wavy; second from  $\frac{3}{4}$  costa to  $\frac{2}{3}$  dorsum, angled outwards beneath costa, thence nearly straight; a pale-brownish, transverse, median, discal mark containing two fuscous dots; a line of minute white dots from costa near apex to tornus; a submarginal series of fuscous dots; an interrupted terminal fuscous line; cilia purple-fuscous, bases and apices whitish. Hindwings with termen wavy, slightly angled on vein 4; as forewings but without first line.

*Hab.*—Northern Queensland: Cairns; one specimen. Type in Coll. Lyell.

## 24. Gen. SOPHTA, Wlk.

Frons with strong rounded prominence. Palpi rather long, obliquely ascending; second joint long, thickened with appressed scales, expanded at apex; terminal joint minute. Thorax and abdomen without crests. Posterior tibiae slightly hairy. Forewings normal. Hindwings with 5 from well below middle ( $\frac{1}{4}$ ).

*concavata*, Wlk.

## 25. Gen. CALLIPYRIS, Meyr.

Frons not projecting but with an anterior tuft of scales. Palpi long, obliquely porrect; second joint long, with long hairs on upper-surface forming an apical tuft; terminal joint short. Thorax and abdomen without crests. Posterior tibiae smooth. Forewings with 8, 9, 10 stalked from areole. Hindwings with 5 from slightly below middle ( $\frac{2}{3}$ ).

A development from *Corgatha*, differing in the neuration of the forewings.

*drosera*, Meyr.

## 26. Gen. CORGATHA, Wlk.

Frons not projecting but with an anterior tuft of scales. Palpi long, obliquely porrect; second joint long, with long hairs on upper-surface forming an apical tuft; terminal joint short. Thorax and abdomen without crests. Posterior tibiae hairy on dorsum. Forewings normal. Hindwings with 5 from below middle (usually  $\frac{1}{3}$ , sometimes  $\frac{2}{3}$ ).

*anthina*, Turn. *omopsis*, Meyr. *loromita*, Turn. *minuta*, B-Bak. *dichionistis*, Turn. † *daphoena*, Hmps. *figuralis*, Wlk. † *straminea*, Butl.

CORGATHA MILTOPHYRES, n. sp.

(μιλτοφυρης, vermilion-smeared).

♂, 23 mm. Head grey. Palpi  $1\frac{1}{4}$ ; fuscous irrorated with white. Antennae grey; in male simple, ciliations minute. Thorax purple-red; tegulae fuscous-brown; patagia purple, bases fuscous-brown. Abdomen ochreous-whitish, basal half of dorsum purple-red. Legs fuscous, irrorated with white; posterior pair more white, the tarsi annulated with purple-red. Forewings triangular, costa straight but bent before apex, apex acute, slightly produced, termen angled on vein 4, slightly concave above angle, straight below; dorsal quadrant so far as postmedian line deep red with purple iridescence; costa so far as antemedian line grey, mixed with white towards edge; antemedian line from  $\frac{1}{3}$  costa to  $\frac{1}{3}$  dorsum, nearly straight, but slightly angled outwards above

middle, grey; a narrow white transverse discal mark extending to costa; median space before this fuscous-red; post-median line indistinct towards costa, finely crenulate, incurved below middle, ending on  $\frac{3}{4}$  dorsum, preceded by a broadly suffused interrupted ochreous line, which is interrupted in middle by a white spot; a fine whitish crenulate subterminal line defined anteriorly by reddish-brown; terminal area purple-white with terminal and wavy sub-marginal lines reddish-fuscous; posterior veins ochreous-streaked; cilia yellow, on tornus purple-white. Hindwings with termen straight, apex and tornus rounded; as forewings but whitish towards costa.

*Hab.*—Queensland: Montville (1,500 ft.), near Nambour, in October; one specimen.

#### 27. Gen. HYPOSADA, Hmps.

Frons not projecting. Palpi moderate, ascending; second joint rough-scaled, with a minute posterior apical tuft; terminal joint minute. Thorax and abdomen without crests. Posterior tibiae smooth. Forewings normal. Hindwings with cell slightly over  $\frac{1}{3}$ ; 3 and 4 short-stalked, 5 from well below middle ( $\frac{1}{3}$ ).

*hydrocampata*, Gn.

#### 28. Gen. HYPOBLETA, Turn.

Frons not projecting. Palpi moderate, slender, ascending; second joint slightly roughened, with a small posterior apical tuft of hairs; terminal joint short. Thorax not crested. Abdomen with a small dorsal crest on basal segment. Posterior tibiae smooth. Forewings normal. Hindwings with cell  $\frac{1}{3}$ ; 3 and 4 short-stalked, 5 from well below middle ( $\frac{1}{4}$ ).

Nearly allied to the preceding genus.

*cymaea*, Turn.

#### 29. Gen. ORUZA, Wlk.

Frons not projecting. Palpi moderate or rather long, upturned; second joint thickened with appressed scales; terminal joint short or moderate. Thorax and abdomen without crests. Posterior tibiae smooth. Forewings normal. Hindwings with cell about  $\frac{1}{3}$ ; 3 and 4 connate or short-stalked, 5 from well below middle ( $\frac{1}{4}$  to  $\frac{1}{3}$ ).

*semilux*, Wlk. • *crocodeta*, Turn. *cariosa*, Luc.

#### 30. Gen. LOPHORUZA, Hmps.

I have no examples of this genus for examination.

† *addescens*, Swin. † *xylozona*, Low.

## 31. Gen. EUCOLASTRA, Butl.

Frons not projecting. Palpi rather long, upturned, appressed to frons; second joint nearly smooth; terminal joint long. Thorax and abdomen without crests. Posterior tibiae smooth, with a median dorsal tuft of hairs. Forewings normal. Hindwings with cell about  $\frac{1}{2}$ ; 5 from near lower angle ( $\frac{1}{5}$ ).

*fasciata*, Butl. † *euryinpha*, Turn. † *phaeozona*, Hmps.  
† *thermozona*, Hmps.

## 32. Gen. MIMASURA, Hmps.

Frons with small rounded prominence. Palpi moderate, ascending; second joint shortly rough-haired; terminal joint short. Thorax and abdomen not crested. Posterior tibiae smooth. Forewings normal, areole rather large. Hindwings with cell  $\frac{2}{3}$ ; 5 from much below middle ( $\frac{1}{4}$ ), 8 anastomosing with cell to  $\frac{1}{4}$ .

This diagnosis is taken from the Australian species. Hampson describes the terminal joint of palpi as long, and figures it as such in one species, but as short in two species.

*albiceris*, Turn.

## 33. Gen. EUSTROTIA, Hb.

Frons not projecting. Palpi moderate, oblique, or ascending; second joint thickened with appressed scales; terminal joint short or moderate. Thorax not crested. Abdomen with a dorsal crest on basal segment. Posterior tibiae smooth or slightly hairy on dorsum. Forewings normal. Hindwings with cell  $\frac{1}{2}$  or more; 5 from near lower angle ( $\frac{1}{5}$  or  $\frac{1}{4}$ ).

*crystallodes*, Meyr.: Trans. Ent. Soc., 1902, p. 42; of this *argotypa*, Turn., is a synonym. *rhaptina*, Turn. *amorpha*, Butl. *ritsemae*, Snel.; of this *thermozona*, Hmps., is a synonym. † *macrosema*, Low. † *euchrysa*, Low.

## 34. Gen. MALIATTHA, Wlk.

Frons not projecting. Palpi moderate, upturned; second joint thickened with appressed scales, slightly roughened anteriorly; terminal joint moderate. Thorax with a small posterior crest. Abdomen with dorsal crests on first, third, and fourth segments. Posterior tibiae with median and apical tufts of hair on dorsum. Forewings normal. Hindwings with cell over  $\frac{1}{2}$ ; 3 and 4 stalked, 5 from near lower angle ( $\frac{1}{8}$ ).

I separate this from *Lithacodia*, not only by the stalking of 3 and 4 of hindwings, which by itself might not be sufficient, but also by the much smaller thoracic crest, the longer,

more upturned, smoother palpi, with longer terminal joint, and the closer approximation of 5 of hindwings to angle.

*ferrugina*, Turn. *signifera*, Wlk.

### 35. Gen. LITHACODIA, Hb.

Frons not projecting. Palpi moderate, obliquely ascending; second joint thickened with rough hairs; terminal joint short. Thorax with a large posterior crest. Abdomen with dorsal crest on third segment, and sometimes on first, fourth, and fifth segments. Posterior tibiae hairy on dorsum. Forewings normal. Hindwings with cell  $\frac{1}{2}$  or more; 5 from below middle ( $\frac{1}{8}$  to  $\frac{1}{3}$ ).

*bryistis*, Turn. *clandestina*, Turn.

### 36. Gen. UNCULA, Swin.

This genus is unknown to me.

† *lunata*, Low.

### 37. Gen. HABROPHYES, nov. (ἁβροφύης, tender).

Frons with slight rounded projection. Palpi rather short, porrect; second joint thickened with rough hairs; terminal joint minute, concealed. Thorax with a rounded posterior crest. Abdomen not crested. Posterior tibiae nearly smooth. Forewings with areole very large. Hindwings with cell about  $\frac{3}{5}$ , its lower angle projecting; 3 and 4 separate at origin, 5 from middle of cell, 6 and 7 stalked, 8 approximated to cell as far as middle.

The neuration of both wings is peculiar.

*ruthosoma*, Turn.

### 38. Gen. EPOPSIMA, nov. (ἐποψιμος, conspicuous).

Frons with rounded projection. Palpi long, upturned, appressed to frons; second joint thickened with appressed scales; terminal joint long. Thorax and abdomen without crests. Posterior tibiae smooth, but with a small median dorsal tuft of hairs. Forewings normal. Hindwings with 5 from well below middle ( $\frac{1}{4}$ ).

*fasciolata*, Butl.

### 39. Gen. TARACHE, Hb.

Frons with a slight rounded prominence. Palpi short, obliquely porrect; second joint shortly rough-scaled; third joint very short. Thorax with a small rounded posterior crest. Abdomen not crested. Posterior tibiae smooth. Forewings normal. Hindwings with cell over  $\frac{1}{2}$ ; 3 and 4 approximated at origin or stalked; 5 from well below middle ( $\frac{1}{4}$  or less); 8 anastomosing with cell to near middle.



*nivipicta*, Butl. *hieroglyphica*, Low. *clerana*, Low.  
 † *elaeoa*, Hmps. † *neurota*, Low. *crocata*, Gn. *xuthota*,  
 Hmps. *detrita*, Butl. *thapsina*, Turn.

TARACHE EUSCHEMA, n. sp.

(εὐσχημος, with conspicuous pattern).

♀, 20 mm. Head, palpi, and antennae brown. Thorax and abdomen brown with some whitish scales. Legs brown; posterior tibiae and tarsi mostly whitish on internal surface. Forewings triangular, costa nearly straight, apex rounded-rectangular, termen slightly bowed, scarcely oblique; reddish-brown, markings whitish, partly edged with fuscous; an incomplete sub-basal line; a slightly dentate conspicuous line from  $\frac{1}{4}$  costa to  $\frac{1}{3}$  dorsum; orbicular small, circular, brown-centred, touching antemedian line; reniform large, 8-shaped, with two included brown dots; a fine, indistinct, dentate line from  $\frac{3}{4}$  costa; a subapical whitish-ochreous shade, preceded by fuscous, and followed by a submarginal series of white dots, edged posteriorly with fuscous; cilia reddish-brown, apices fuscous barred with whitish. Hindwings with 3 and 4 approximated at base; termen rounded; fuscous; cilia as forewings.

This is the only Australian species in which 3 and 4 of hindwings are not stalked. Type in Coll. Lyell.

*Hab.*—Northern Territory: Port Darwin, in November; one specimen, received from Mr. F. P. Dodd.

Subfam. EUTELIANAE.

- |   |                       |
|---|-----------------------|
| 1. Thorax with sharp ridgelike anterior crest                     | 1. <i>Bombotelia</i>  |
| Thorax without sharp anterior crest ...                           | 2.                    |
| 2. Abdomen with dorsal crest on basal segment ...                 | 3.                    |
| Abdomen without crests ...  | 6.                    |
| 4. Abdomen with dorsal crest on anal segment                      | 2. <i>Pataeta</i>     |
| Abdomen without crest on anal segment                             | 5.                    |
| 5. Posterior tarsi with long hairs on dorsum of first segment ... | 4. <i>Anuga</i>       |
| Posterior tarsi without long hairs on dorsum ...                  | 3. <i>Phlegetonia</i> |
| 6. Forewings without areole ...                                   | 5. <i>Anigraea</i>    |
| Forewings with areole ...   | 6. <i>Paectes</i>     |

1. Gen. BOMBOTELIA, Hmps.

Frons not projecting, but with an anterior tuft of hairs. Palpi long, ascending; second joint thickened with appressed hairs, slightly roughened anteriorly; terminal joint long. Thorax with a sharp ridge-like anterior crest extending to middle. Abdomen sometimes with a few small dorsal crests, but these may be absent in well-preserved specimens; and

with small paired anal tufts. Posterior tibiae hairy. Neuration normal.

*jocosatrix*, Gn. *plumbea*, Wlk.; of this *oxylopha*, Turn., is a synonym.

## 2. Gen. PATAETA, Wlk.

Frons not projecting. Palpi long, ascending; second joint roughened anteriorly; terminal joint long. Thorax with a posterior crest. Abdomen with dorsal crests on basal and anal segments; and with paired anal tufts. Posterior tibiae smooth. Neuration normal.

In this genus the female frenulum is sometimes multiple.

*carbo*, Gn. *conspicienda*, Wlk. In this there is a small lobe-like basal expansion of the dorsum of the forewings in the male.

## 3. Gen. PHLEGETONIA, Gn.

Frons not projecting; sometimes with an anterior tuft of scales. Palpi long, ascending; second joint thickened with appressed scales, slightly roughened anteriorly; terminal joint long. Thorax with a small posterior crest. Abdomen with a small dorsal crest on basal segment; and with small paired anal tufts. Posterior tibiae smooth. Neuration normal.

*fasciatrix*, Semp. *delatrix*, Gn.

## 4. Gen. ANUGA, Gn.

Antennae of male unipectinate to middle; often longer than forewing. Palpi moderate, ascending; second joint much thickened with loosely appressed scales, rough anteriorly, expanded at apex; terminal joint moderately long, triangularly dilated with scales anteriorly. Thorax with a small posterior crest. Abdomen with a dorsal crest on basal segment; and with paired anal tufts. Posterior tibiae and first tarsal joint with long hairs on dorsal surface. Neuration normal.

*multiplicans*, Wlk. One specimen, received from Mr. L. J. Newman; the locality is not certain, but I believe it came from Northern Queensland.

## 5. Gen. ANIGRAEA, Wlk.

Frons not projecting, but with an anterior tuft of scales. Palpi rather long, ascending; second joint thickened with appressed scales; terminal joint long. Thorax with a small posterior crest. Abdomen without crests, but with paired anal tufts. Posterior tibiae smooth. Forewings without areole, 7, 8, 9 stalked. Hindwings normal.

According to Hampson a minute areole is sometimes present.

*ochrobasis*, Hmps.

#### 6. Gen. PAECTES, Hb.

Frons not projecting, but with an anterior tuft of scales. Palpi long, ascending; second joint with appressed scales, slightly roughened anteriorly; terminal joint long. Thorax with a rounded anterior crest. Abdomen without crests, but with short paired anal tufts. Posterior tibiae with long hairs on dorsum beyond middle. Neuration normal.

*cyanodes*, Turn.

#### Subfam. STICTOPTERINAE.

- |  |                       |
|--|-----------------------|
| 1. Palpi with third joint long and slightly dilated before apex ... .. | 1. <i>Stictoptera</i> |
| Palpi with third joint normal ... ..                                   | 2.                    |
| 2. Forewings without areole ... ..                                     | 3. <i>Gyrtona</i>     |
| Forewings with areole ... ..   | 2. <i>Lophoptera</i>  |

#### 1. Gen. STICTOPTERA, Gn.

Frons not projecting, but with an anterior tuft of scales. Palpi long, ascending; second joint thickened with appressed scales; terminal joint long, slightly dilated before apex. Thorax with rounded anterior crest, and long, erectile tufts of hair on inner anterior angle of patagia. Abdomen with dorsal crests on first and third segments. Posterior tibiae hairy on dorsum. Forewings normal. Hindwings with 3 anastomosing with cell at  $\frac{1}{3}$ .

STICTOPTERA PAMMECES, n. sp. (παμμηκης, very long).

♂, 48 mm. Head fuscous; face fuscous mixed with whitish. Palpi  $2\frac{1}{2}$ ; fuscous mixed with whitish. Antennae fuscous; ciliations in male  $\frac{1}{2}$ . Thorax brown-whitish; part of tegulae, patagial crests, and a pair of posterior spots fuscous. Abdomen brown-whitish. Legs ochreous-whitish mixed with fuscous; middle tibiae and tarsi very long and blackish externally. Forewings narrow, elongate, dilated posteriorly, costa straight for  $\frac{3}{4}$ , then arched, apex round-pointed, termen bowed, oblique, crenulate; brown-whitish; a tuft of raised scales in lower angle of cell; apical half of costal area narrowly fuscous with blackish streaks on veins; a broad tornal fuscous area reaching from  $\frac{1}{3}$  dorsum to above middle of termen, its edge suffused; contained in this are the ends of a double post-median line ending in  $\frac{4}{5}$  dorsum, and a large circular whitish tornal spot; a blackish terminal line in fuscous area; cilia

fuscous with narrow whitish bars, wholly whitish on upper part of termen. Hindwings with termen rounded, wavy; scaleless and translucent except veins and a broad terminal band, which are dark fuscous; cilia whitish, bases fuscous on apex.

*Hab.*—Northern Queensland: Cairns district: one specimen, received from Mr. F. P. Dodd.

## 2. Gen. LOPHOPTERA, Gn.

Frons not projecting, but with an anterior tuft of scales. Palpi moderate, obliquely ascending; second joint thickened with appressed scales, slightly rough anteriorly; terminal joint short. Thorax with a small posterior crest. Abdomen without crests. Posterior tibiae with postmedian and apical tufts of hair on dorsum. Forewings normal. Hindwings with 8 anastomosing with cell at  $\frac{1}{3}$ .

*squamigera*, Gn. *abbreviata*, Wlk. *Hab.*—Queensland: Brisbane. *aleuca*, Hmps. *illucida*, Wlk. *Hab.*—Northern Queensland: Townsville. *plumbeola*, Hmps. *Hab.*—Northern Territory: Port Darwin; in Coll. Lyell.

## Gen. GYRTONA, Wlk.

Frons not projecting. Palpi moderately long, obliquely ascending; second joint with appressed scales; terminal joint moderate. Thorax with a posterior crest. Abdomen sometimes with small crests on median segments. Posterior tibiae smooth with a small apical dorsal hair tuft. Forewings without areole, 7, 8, 9 stalked. Hindwings normal.

There is no areole in the only two specimens I have for examination.

*lophota*, Turn. *semicarbonalis*, Wlk. *Hab.*—Northern Queensland: Cairns. *divitalis*, Wlk. *Hab.*—Northern Queensland: Cairns; in Coll. Lyell.

## Subfam. SARROTHRIPINAE.

In this and in the Acontianae I have followed Hampson rather closely.

- |   |                       |
|---|-----------------------|
| 1. Forewings without areole, 7, 8, 9 stalked                              | 2.                    |
| Forewings with areole, or 7 disconnected                                  |                       |
| and 8, 9, 10 stalked ... ..   | 4.                    |
| 2. Forewings with 7, 8, 9, 10 stalked ... ..                              | 3.                    |
| Forewings with 10 separate ... ..   | 11. <i>Elesma</i>     |
| 3. Hindwings with 3 and 4 coincident ... ..                               | 1. <i>Microthripa</i> |
| Hindwings with 3 and 4 stalked ... ..                                     | 2. <i>Nanaguna</i>    |
| 4. Forewings with 10 connate or stalked from areole ... ..                | 5.                    |
| Forewings with 10 arising separately from areole or 7 disconnected ... .. | 6.                    |

- |   |                        |
|---|------------------------|
| 5. Hindwings with 3 and 4 coincident ... ..   | 3. <i>Garella</i>      |
| Hindwings with 3 and 4 stalked ... ..   | 4. <i>Gyrtothripa</i>  |
| 6. Hindwings with 3 and 4 coincident ... ..   | 5. <i>Characoma</i>    |
| Hindwings with 3 and 4 stalked ... ..   | 7.                     |
| Hindwings with 3 and 4 not stalked ... ..   | 11.                    |
| 7. Abdomen with 3 or more dorsal crests ... ..  | 8.                     |
| Abdomen with one or two dorsal crests only ... ..   | 10.                    |
| 8. Abdomen with large crests on 4th and 5th segments ... ..                                       | 6. <i>Lophothripa</i>  |
| Abdomen with crests on 3 basal segments only ... ..   | 9.                     |
| 9. Palpi with second joint broadly expanded at apex ... ..  | 7. <i>Mniothripa</i>   |
| Palpi with second joint not expanded at apex ... ..   | 12. <i>Barasa</i>      |
| 10. Palpi with 3rd joint as long or longer than 2nd and fringed with hair on upper-surface ... .. | 8. <i>Sarrothripus</i> |
| Palpi with 3rd joint shorter than 2nd, smooth ... ..  | 10. <i>Giaura</i>      |
| 11. Abdomen with one or more dorsal crests ... ..   | 12.                    |
| Abdomen without crests ... ..   | 20.                    |
| 12. Palpi porrect, 2nd joint with an apical inferior tuft ... ..                                  | 9. <i>Selepa</i>       |
| Palpi not so formed ... ..  | 13.                    |
| 13. Palpi with terminal joint nearly as long or longer than 2nd ... ..                            | 14.                    |
| Palpi with terminal joint not exceeding $\frac{2}{3}$ 2nd ... ..                                  | 16.                    |
| 14. Palpi with long hairs on upper-surface of 2nd joint towards apex ... ..                       | 14. <i>Ochthophora</i> |
| Palpi with 2nd joint smooth on upper surface ... ..   | 15.                    |
| 15. Thorax with a large rough erect posterior crest ... ..  | 13. <i>Ochrothripa</i> |
| Thorax with a small smooth posterior crest ... ..   | 18. <i>Labanda</i>     |
| 16. Palpi with terminal joint about $\frac{1}{2}$ or $\frac{2}{3}$ ... ..                         | 17.                    |
| Palpi with terminal joint not exceeding $\frac{1}{4}$ ... ..                                      | 19.                    |
| 17. Palpi porrect, terminal joint hairy beneath ... ..  | 17. <i>Plotheia</i>    |
| Palpi ascending, terminal joint smooth ... ..   | 18.                    |
| 18. Palpi with terminal joint dilated at apex ... ..  | 16. <i>Gadirtha</i>    |
| Palpi with terminal joint not dilated at apex ... ..  | 19. <i>Blenina</i>     |
| 19. Palpi with 2nd joint strongly expanded with rough hairs above and beneath ... ..              | 21. <i>Timorodes</i>   |
| Palpi with 2nd joint only moderately thickened ... ..   | 22. <i>Risoba</i>      |
| 20. Palpi with terminal joint as long as 2nd ... ..   | 15. <i>Eligma</i>      |
| Palpi with terminal joint not exceeding $\frac{1}{2}$ ... ..                                      | 20. <i>Calathusa</i>   |

### 1. Gen. MICROTHRIPA, Hmps.

Frons not projecting. Palpi moderate, ascending, rather slender; second joint smooth, with a small posterior apical tuft; terminal joint moderate. Thorax not crested. Abdomen



with a dorsal crest on basal segment. Posterior tibiae smooth. Forewings without areole, 7, 8, 9, 10 stalked. Hindwings with 3 and 4 coincident, 8 anastomosing with cell to  $\frac{1}{2}$ .

*boeota*, Turn.

## 2. Gen. NANAGUNA, Wlk.

Frons not projecting. Palpi long, ascending; second joint smooth, or slightly rough anteriorly; terminal joint long, sometimes as long as second. Thorax with a small posterior crest. Abdomen with a dorsal crest on basal segment. Posterior tibiae smooth, with a small apical dorsal tuft. Forewings without areole, 7, 8, 9, 10 stalked. Hindwings with 3 and 4 stalked, 8 anastomosing with cell to about middle.

*breviuscula*, Wlk. *albisepta*, Hmps. *Hab.*—Northern Queensland: Cairns. *clopaea*, Turn. *variegata*, Hmps. *Hab.*—Northern Queensland: Cairns, Townsville.

NANAGUNA PRAEDULCIS, n. sp. (*praedulcis*, very sweet).

♀, 27-29 mm. Head and thorax grey tinged with green. Palpi over 2, ascending, terminal joint stout, nearly as long as second; grey irrorated with white. Antennae grey. Abdomen pale grey, towards base whitish, crest greenish-grey. Legs ochreous-whitish; anterior and middle pairs fuscous on upper-surface. Forewings suboblong, costa strongly arched at base, thence gently; apex rectangular, termen scarcely bowed, slightly oblique; whitish, margins suffused with grey-green and centre with pale pink; antemedian faint and indistinct, grey-green, from  $\frac{1}{3}$  costa, incurved below cell, then outwardly oblique to mid-dorsum; postmedian double, fuscous, filled in with whitish, obsolete towards costa, denticulate to below cell, then incurved, outcurved on vein 1, joining antemedian on dorsum, a fuscous subdorsal spot on outer line; subterminal whitish, indistinct; a fuscous terminal spot on vein 3; another subterminal between 1 and 2; cilia whitish. Hindwings with termen rounded; whitish, towards termen suffused with pale fuscous; cilia whitish.

*Hab.*—Northern Queensland: Kuranda, near Cairns, in September; two specimens, received from Mr. F. P. Dodd.

## 3. Gen. GARELLA, Wlk.

Frons not projecting. Palpi rather long, ascending; second joint moderately thickened with appressed scales; terminal joint rather long. Thorax with a posterior crest. Abdomen with small dorsal crests on two basal segments. Posterior tibiae smooth, with a small apical dorsal tuft. Forewings with minute areole, 7, 8, 9 stalked from areole, 10

connate. Hindwings with 4 absent, 3 and 5 stalked, 8 anastomosing with cell to about middle.

*rotundipennis*, Wlk.

#### 4. Gen. GYRTOTHRIPA, Hmps.

Frons not projecting, but with long anterior tuft. Palpi long, porrect; second joint greatly thickened with appressed scales, especially on upper-surface; terminal joint short. Thorax not crested. Abdomen with flattened dorsal crest on basal segment. Posterior tibiae smooth on dorsum, hairy on ventral surface (at least in male). Forewings with minute areole, 7, 8, 9, 10 stalked from areole. Hindwings with 3 and 4 stalked, 8 anastomosing with cell not quite to middle.

*pusilla*, Moore.

#### 5. Gen. CHARACOMA, Wlk.

Frons not projecting. Palpi long, ascending; second joint smooth, rather slender; terminal joint long ( $\frac{2}{3}$ ). Thorax with a posterior crest. Abdomen with small dorsal crests on one or two basal segments. Posterior tibiae smooth, with a small dorsal apical tuft. Forewings with areole very long and narrow. Hindwings with 4 absent, 3 and 5 stalked, 8 anastomosing with cell to about  $\frac{1}{3}$ .

*vallata*, Meyr.

#### 6. Gen. LOPHOTHRIPA, Hmps.

Frons not projecting, but with a large anterior tuft. Palpi long, ascending; second joint thickened with appressed scales, expanded at apex; terminal joint long. Thorax with a large posterior crest. Abdomen with a series of dorsal crests, those on fourth and fifth segments large. Posterior tibiae smooth. Forewings normal. Hindwings with 3 and 4 stalked, 8 anastomosing with cell at  $\frac{1}{4}$ .

*vitea*, Swin.

#### 4. Gen. MNIOTHRIPA, Hmps.

Frons not projecting. Palpi moderate, ascending; second joint greatly thickened with appressed scales so as to be nearly as broad as long; terminal joint moderate. Thorax with a posterior crest. Abdomen with dorsal crests on three basal segments. Posterior tibiae smooth, with a dorsal apical tuft. Forewings normal. Hindwings with 3 and 4 stalked, 5 connate, 8 anastomosing with cell to  $\frac{2}{5}$ .

*lichenigera*, Hmps. *Hab.* — Northern Queensland: Cairns.

#### 8. Gen. SARROTHRIPUS, Curt.

Frons not projecting, but with a large anterior tuft. Palpi long, porrect or obliquely ascending; second joint

rather short, expanded at apex; terminal joint longer than second, loosely scaled, with a ridge of hairs on upper (posterior) surface from base nearly to apex. Thorax with a posterior crest. Abdomen with a dorsal crest on basal segment, rarely also on second segment. Posterior tibiae smooth. Forewings with areole long and narrow; or without areole and with 8, 9, 10 stalked owing to the non-development of the bar between 7 and 8. Hindwings with 3 and 4 stalked, 5 connate, anastomosing with cell to near middle.

The abnormal neururation of the forewings I find in *parvella*, *symmicta*, *crystallites*, *boeopis*, and *abstrusa*; not in the other species.

*parvella*, Wlk. *Hab.*—Northern Queensland: Cairns. *symmicta*, Turn. *indica*, Feld. † *strigivenata*, Hmps. *minuta*, Turn. *ecophila*, Meyr. *crystallites*, Meyr. *boeopis*, Turn. *abstrusa*, Turn.

#### 9. Gen. SELEPA, Moore.

Frons not projecting, but with an anterior tuft of scales. Palpi very long, porrect; second joint very long, with long hairs on lower surface forming an apical tuft; terminal joint moderately long, under  $\frac{1}{2}$ . Antennae with basal joint thickened, and with a small anterior apical tuft. Thorax with a small posterior crest. Abdomen with dorsal crests on basal two or three segments. Posterior tibiae smooth. Forewings normal. Hindwings with 8 anastomosing with cell at  $\frac{1}{4}$ .

Best characterized by the palpi and basal joint of antennae.

*celtis*, Moore. *rhythmopis*, Turn. *geraea*, Hmps. *discigera*, Wlk.

SELEPA EURYOCHRA, n. sp. (εὐρυχωρος, broadly pale).

♂, 21 mm. Head and thorax brown-whitish. Palpi  $2\frac{1}{2}$ ; brown-fuscous, beneath whitish. Antennae brown-fuscous. Abdomen whitish. Legs ochreous-whitish; anterior tibiae and tarsi fuscous anteriorly. Forewings suboblong, costa straight but arched at base and apex, apex rounded, termen bowed, slightly oblique; brown-whitish; a broad fuscous costal streak not reaching apex; a broader fuscous and blackish dorsal streak reaching beyond tornus to below middle of termen; cilia pale grey. Hindwings with termen rounded; whitish, slightly suffused with grey on apex and termen; cilia whitish.

*Hab.*—Northern Queensland: Kuranda, near Cairns, in December; one specimen, received from Mr. F. P. Dodd.

## 10. Gen. GIAURA, Wlk.

Frons not projecting. Palpi long, ascending, appressed to frons; second joint smooth; terminal joint long ( $\frac{2}{3}$ ). Thorax not crested. Abdomen with a dorsal crest on basal segment. Posterior tibiae smooth. Forewings with areole long. Hindwings with 3 and 4 stalked, 8 anastomosing with cell near base.

*punctata*, Luc.

## 11. Gen. ELESMA, Wlk.

Frons not projecting, but with an anterior tuft of scales. Palpi rather short, ascending; second joint smooth, anterior edge slightly rough; terminal joint short. Thorax with a posterior crest. Abdomen with a small dorsal crest on basal segment. Posterior tibiae smooth. Forewings without areole, 7, 8, 9 stalked. Hindwings with cell very long ( $\frac{2}{3}$ ), discocellulars angled, 3 and 4 stalked, 8 anastomosing with cell to about middle.

*subglauca*, Wlk.

## 12. Gen. BARASA, Wlk.

Frons not projecting. Palpi long, ascending, appressed to frons; second joint smooth-scaled; terminal joint long (about  $\frac{2}{3}$ ). Thorax with a small posterior crest. Abdomen with dorsal crests on first three segments. Posterior tibiae slightly hairy on dorsum. Forewings normal. Hindwings with 3 and 4 stalked, 8 anastomosing with cell to about middle.

*cymatistis*, Meyr.

## BARASA MELANOGRAPTA, n. sp.

(*μελανογραπτος*, inscribed with black).

♂, 22 mm. Head white. Palpi about 1; fuscous, beneath white. Antennae grey, at base white; ciliations in male 1. Thorax white; tegulae blackish except at base and apex. Abdomen grey, beneath white. Legs white; anterior femora dark fuscous in front, anterior tibiae and tarsi fuscous on inner side. Forewings moderate, somewhat dilated posteriorly, costa nearly straight, apex rectangular, termen strongly oblique; white; extreme bases of costa and dorsum blackish; two blackish subcostal spots placed obliquely representing sub-basal line; antemedian blackish from  $\frac{1}{3}$  costa, at first transverse, then outwardly oblique, broadly interrupted below cell; postmedian blackish, from  $\frac{2}{3}$  costa, wavy, inwardly oblique to  $\frac{2}{3}$  dorsum, connected by a broad blackish bar with antemedian above fold; some grey suffusion between the lines; a blackish subterminal line from apex, thickened in middle

part, not reaching tornus; a terminal series of blackish dots; cilia whitish, on apex blackish. Hindwings with termen rounded; white, cilia white.

*Hab.*—Northern Territory: Port Darwin, in August; one specimen, received from Mr. G. F. Hill.

BARASA ORTHOSTICHA, n. sp. (ὀρθοστιχος, straight-lined).

♀, 28 mm. Head whitish with some brownish scales on face. Palpi whitish, irrorated and palely suffused with brownish. Thorax whitish irrorated with pale grey. Abdomen whitish-grey. Legs whitish-grey; anterior pair darker. Forewings sub-oblong, costa strongly arched, near base, thence nearly straight, apex rounded-rectangular, termen slightly bowed, not oblique; whitish irrorated with pale grey; markings fuscous; a line from base of costa along fold for a short distance, then bent obliquely to rejoin costa at  $\frac{1}{5}$ ; a fine wavy transverse median line, curved inwards beneath cell, angled outwards on fold, and inwards on vein 1; a brownish sub-costal discal dot; a second similar line not far from first, curved outwards beneath cell, angled inwards on fold, outwards on vein 1; a thick line nearly straight from costa to dorsum at  $\frac{5}{8}$ ; some terminal dots; cilia whitish, indistinctly barred with pale grey. Hindwings with termen rounded; white; a narrow fuscous terminal suffusion not extending to tornus; cilia white, bases pale grey, on tornus and dorsum wholly white.

*Hab.*—Northern Queensland: Claudie River, in February; one specimen, taken by Mr. J. A. Kershaw. Type in National Museum, Melbourne.

### 13. Gen. OCHROTHRIPA, Hmps.

Frons not projecting, but with an anterior tuft of scales. Palpi long, ascending; second joint reaching vertex, rather slender, nearly smooth; terminal joint as long as second, smooth, slightly dilated towards apex. Thorax with a large rough erect posterior crest. Abdomen with small dorsal crests on three basal segments. Posterior tibiae nearly smooth. Forewings normal. Hindwings with 8 anastomosing with cell at  $\frac{1}{4}$ .

*leptochroma*, Turn.

### 14. Gen. OCHTHOPHORA, Turn.

Frons not projecting, but with an anterior tuft of scales. Palpi very long, obliquely porrect; second joint fringed with hairs on upper edge towards apex; terminal joint much longer than second, smooth, slightly dilated towards apex. Thorax with a large erect posterior crest. Abdomen with



a dorsal crest on basal segment. Posterior tibiae slightly hairy on dorsum. Forewings normal. Hindwings with 4 and 5 stalked, 8 anastomosing with cell nearly to middle.

*sericina*, Turn.

#### 15. Gen. ELIGMA, Hb.

Frons not projecting. Palpi very long, ascending; second joint reaching or exceeding vertex, smooth; terminal joint as long or longer than second, smooth, dilated towards apex. Thorax and abdomen smooth and without crests. Posterior tibiae slightly hairy. Forewings with areole long and narrow. Hindwings with 8 anastomosing with cell to  $\frac{3}{4}$ .

Hampson describes the tongue as small and aborted, but it seems fairly developed in the Australian species.

*orthoxantha*, Low.

#### 16. Gen. GADIRTHA, Wlk.

Frons not projecting. Palpi very long, ascending; second joint with short loose hairs; terminal joint about  $\frac{1}{2}$ , smooth, dilated at apex. Thorax with a slight posterior crest. Abdomen with a dorsal series of hairy crests. Posterior tibiae hairy. Forewings normal. Hindwings with 8 anastomosing with cell to  $\frac{1}{3}$  or to middle.

*pulchra*, Butl. *inexacta*, Wlk. † *hades*, Low.

#### 17. Gen. PLOTHEIA, Wlk.

Frons not projecting, but with an anterior tuft of hair. Palpi very long, porrect; second joint with long hairs above and beneath; terminal joint  $\frac{1}{2}$ , hairy beneath. Thorax not crested. Abdomen with a series of small dorsal crests. Posterior tibiae smooth. Forewings normal. Hindwings with 8 anastomosing with cell to middle.

Allied to *Gadirtha*, but with porrect palpi, the third joint hairy beneath and not dilated at apex.

*elongata*, Hmps. *Hab.*—Queensland: Brisbane, Mount Tambourine; five specimens. An extraordinarily variable species, no two specimens being alike, which will, I think, prove identical with *Gadirtha elongata*, Hmps., represented by a single female from Assam; if so *poliochroa*, Hmps., is a synonym.

#### 18. Gen. LABANDA, Wlk.

Frons not projecting. Palpi very long, ascending; second joint smooth, slender, reaching or exceeding vertex; terminal joint nearly as long as second. Thorax with a small posterior crest. Abdomen with dorsal crests on two basal segments. Posterior tibiae smooth. Forewings normal. Hindwings with 3 and 4 separate, 8 anastomosing with cell at  $\frac{1}{4}$ .

This seems best distinguished from *Blenina* by the much longer and more slender palpi. The neurational character in the hindwing may not be constant.

*amabilis*, Low.

#### 19. Gen. *BLENINA*, Wlk.

Frons not projecting. Palpi moderate or long, ascending; second joint moderately thickened with appressed scales, not reaching vertex; terminal joint moderate, not exceeding  $\frac{2}{3}$ . Thorax with a small posterior crest. Abdomen with dorsal crests on basal two or three segments. Posterior tibiae smooth. Forewings normal. Hindwings with 3 and 4 connate, 8 anastomosing with cell at  $\frac{1}{4}$ .

*lichenopa*, Meyr. *metachrysa*, Turn. *Hab.*—Northern Queensland: Townsville, Rockhampton, Brisbane.

#### *BLENINA SAMPHIROPHORA*, n. sp.

(σαμφειροφορος, bearing sapphires).

♂, 23 mm. Head and thorax fuscous, mixed with ochreous-grey-whitish, Palpi pale fuscous with two broad whitish bars towards base. Antennae fuscous. Abdomen ochreous-grey-whitish. Palpi pale fuscous with two broad middle tibiae and tarsi barred with dark fuscous on upper-surface. Forewings triangular, costa rather strongly arched, apex rounded, termen scarcely bowed, wavy, scarcely oblique; whitish densely irrorated with dark fuscous and to a lesser degree with pale ochreous: antemedian blackish, from  $\frac{1}{4}$  costa, outwardly oblique, below middle lost in an ill-defined blackish large dorsal spot; postmedian similar, from beyond midcosta obliquely outwards, curved in disc on vein 4, angled inwards on fold, ending on  $\frac{4}{5}$  dorsum; a small whitish suffused spot on  $\frac{4}{5}$  costa, two black subterminal spots, which in oblique light are a brilliant blue, between veins 4 and 5 and veins 6 and 7; upper spot connected with costa by a blackish line edged posteriorly with ochreous-whitish; a fine short whitish-ochreous streak midway between spots, and a second beneath them; cilia fuscous, bases barred with whitish, on apex and tornus whitish. Hindwings with termen rounded; pale grey; some grey-whitish terminal spots towards apex; cilia as forewings but whitish from midtermen to tornus and on dorsum.

*Hab.*—Northern Territory: Port Darwin, in October; one specimen, received from Mr. F. P. Dodd.

#### 20. Gen. *CALATHUSA*, Wlk.

Frons not projecting. Palpi very long, ascending; second joint rather slender, slightly rough, sometimes with a small posterior apical tuft; terminal joint short or rather long ( $\frac{1}{3}$ ).

Thorax with small posterior and sometimes anterior crests. Abdomen without crests. Posterior tibiae slightly hairy on dorsum. Forewings normal. Hindwings with 8 anastomosing with cell at  $\frac{1}{4}$ .

*basicunea*, Wlk.; of this *abebaea*, Turn., *subflavida*, Hmps., and *arethusa*, Fawcett, are synonyms. †*hypotherma*, Low. *ischnodes*, Turn. *octogesima*, Turn. *stenophylla*, Turn. *dispila*, Turn. *mesospila*, Turn. *metableta*, Turn. *eremna*, Turn. *taphreuta*, Meyr.: Trans. Ent. Soc., 1902, p. 215; of this *delosticha*, Turn., is a synonym.

21. Gen. TIMORODES, Meyr.: Trans. Ent. Soc., 1902, p. 46.

*Gryposoba*, Hmps.: Cat. Lep. Phal., xi., p. 423 (1912).

Frons not projecting, but with an anterior tuft of scales. Palpi moderate, obliquely ascending; second joint strongly expanded with rough hairs above and beneath, terminal joint short. Thorax with large erect posterior crest. Abdomen with dorsal crests on second and third segments. Posterior tibiae smooth. Forewings with a scale tooth on tornus; areole long and narrow. Hindwings with 8 anastomosing with cell to  $\frac{1}{4}$ .

*blepharias*, Meyr.: Trans. Ent. Soc., 1902, p. 46; of this *catagrapha*, Turn., is a synonym.

## 22. Gen. RISOBIA, Moore.

Frons not projecting. Palpi moderate, ascending; second joint rather slender, slightly rough anteriorly; terminal joint short. Thorax with a large erect posterior crest. Posterior tibiae nearly smooth. Forewings with areole long. Hindwings with 8 anastomosing with cell near base only.

According to Hampson the abdomen has minute dorsal crests on median segments. These are not present in my solitary example, but they may have been denuded.

*grisea*, B-Bak. *Hab.*—Northern Queensland: Cairns.

## Subfam. ACONTIANAE.

- |  |                       |
|--|-----------------------|
| 1. Forewing without areole ... ..                        | 2.                    |
| Forewing with areole ... ..                              | 5.                    |
| 2. Forewing with 7, 8, 9 stalked ... ..                  | 3.                    |
| Forewing with 7, 8, 9 not stalked ... ..                 | 4.                    |
| 3. Hindwing with 4 absent ... ..                         | 1. <i>Earias</i>      |
| Hindwing with 3 and 4 stalked ... ..                     | 2. <i>Alypophanes</i> |
| 4. Forewing with 8, 9, 10 stalked ... ..                 | 3. <i>Nertobriga</i>  |
| Forewing with 7, 8, and 9, 10 stalked ...                | 15. <i>Acontia</i>    |
| 5. Forewing with 10 stalked with 8, 9 from areole ... .. | 4. <i>Beara</i>       |
| Forewing with 10 separate or connate with 8, 9 ... ..    | 6.                    |

- |   |                        |
|---|------------------------|
| 6. Hindwing with 5 from near lower angle of cell ... ..             | 7.                     |
| Hindwing with 5 from well above angle ( $\frac{1}{3}$ )             | 14.                    |
| 7. Abdomen with two or more dorsal crests                           | 8.                     |
| Abdomen with crest on basal segment only                            | 5. <i>Orthocraspis</i> |
| 8. Posterior tibiae hairy ... ..                                    | 6. <i>Aiteta</i>       |
| Posterior tibiae smooth ... ..                                      | 9.                     |
| 9. Thorax with a ridgelike posterior crest ...                      | 7. <i>Acachmena</i>    |
| Thorax without such crest ... ..                                    | 10. <i>Lasiolopha</i>  |
| 10. Palpi with 2nd joint triangularly dilated                       | 8. <i>Ariola</i>       |
| Palpi with 2nd joint not so ... ..                                  | 11.                    |
| 11. Palpi with 2nd joint rough-scaled ... ..                        | 12.                    |
| Palpi with 2nd joint smooth ... ..                                  | 14.                    |
| 12. Hindwings with 8 anastomosing to $\frac{1}{3}$ or middle ... .. | 9. <i>Westermannia</i> |
| Hindwings with 8 anastomosing near base only ... ..                 | 13.                    |
| 13. Palpi with terminal joint $\frac{2}{3}$ or 1 ... ..             | 11. <i>Paracrama</i>   |
| Palpi with terminal joint not exceeding $\frac{1}{3}$               | 12. <i>Maceda</i>      |
| 14. Palpi with terminal joint much longer than 2nd ... ..           | 13. <i>Cacyparis</i>   |
| Palpi with terminal joint much shorter than 2nd ... ..              | 14. <i>Armactica</i>   |

### 1. Gen. EARIAS, Hb.

Frons not projecting, but with an anterior tuft of scales. Palpi moderate or long, rather slender, obliquely ascending; second joint slightly roughened, sometimes with a slight apical anterior tuft; terminal joint moderate or long ( $\frac{1}{4}$  to 1). Thorax not crested. Abdomen with small dorsal crests on first and second segments. Posterior tibiae smooth. Forewings with subcostal retinaculum in male obsolete; no areole, 7, 8, 9 stalked. Hindwings with 4 absent, 3 and 5 stalked, 8 anastomosing with cell as far as or beyond middle.

Unusually variable in the length of the terminal joint of the palpi, but the genus is a very natural one.

*luteolaria*, Hmps. *flavida*, Feld. *huegeli*, Rogen. *parailela*, Luc. † *subviridis*, Luc. *fabia*, Stoll. *smaragdina*, Butl. *ochrophylla*, Turn.

### 2. Gen. ALYPOPHANES, Turn.: Trans. Roy. Soc. S. Austr., 1908, p. 62.

Frons smooth, not projecting. Palpi moderate, slender, ascending; second joint smooth; terminal joint moderate. Thorax and abdomen without crests. Posterior tibiae smooth. Forewings with subcostal retinaculum in male extremely slender; no areole; 7, 8, 9 stalked. Hindwings with 3 and 4 stalked, 6 and 7 stalked, 8 anastomosing with cell near base only.

*iridocosma*, Turn.: l.c., p. 63.

## 3. Gen. NERTOBRIGA, Wlk.

Frons smooth, not projecting. Palpi moderate, rather slender, ascending; second joint slightly roughened; terminal joint moderate. Thorax without crests. Abdomen with large dorsal crests on four basal segments. Posterior tibiae slightly hairy. Forewings without areole, 8, 9, 10 stalked. Hindwings with 8 anastomosing with cell at  $\frac{1}{4}$ .

*signata*, Wlk.

## 4. Gen. BEARA, Wlk.

Frons not projecting, but with short anterior tuft. Palpi moderate, ascending; second joint moderately thickened, nearly smooth; terminal joint moderate. Thorax with an anterior crest. Abdomen with small dorsal crest on basal segment. Posterior tibiae smooth. Forewings with areole narrow, 8, 9, 10 stalked from areole. Hindwings normal.

*nubiferella*, Wlk. *Hab.*—Northern Queensland: Cairns.

## 5. Gen. ORTHOCRASPIS, Hmps.

Frons smooth, not projecting. Palpi rather short, ascending; second joint rather slender, slightly roughened; terminal joint very short. Thorax not crested. Abdomen with a small dorsal crest on basal segment. Posterior tibiae smooth. Forewings normal. Hindwings with cell long ( $\frac{2}{3}$ ), 3 and 4 short-stalked, 8 anastomosing with cell at  $\frac{1}{3}$ .

## ORTHOCRASPIS LEPTOPLASTA, n. sp.

(λεπτοπλαστος, lightly built).

♂, 30 mm. Head, palpi, and thorax ochreous-whitish-grey. Antennae grey; in male simple. Abdomen grey, beneath pale-ochreous. Legs ochreous-whitish; anterior and middle tibiae and tarsi partly suffused with fuscous. Forewings triangular, costa strongly arched, apex acute, termen straight, not oblique, angled above tornus; ochreous-whitish-grey; two squarish reddish-fuscous costal spots, at  $\frac{1}{3}$  and shortly before  $\frac{2}{3}$ ; costal edge ochreous throughout; termen above angle edged with reddish-ochreous; cilia reddish-ochreous with a purple basal line, beneath angle ochreous-whitish-grey. Hindwings with termen angled on vein 3; grey; an extensive costal and apical suffused ochreous blotch; cilia ochreous, on tornus and dorsum grey-whitish.

*Hab.*—New South Wales: Sydney, in September; one specimen, received from Mr. G. F. Wyld.

## 6. Gen. AITETA, Wlk.

Frons not projecting, sometimes with slight anterior tuft. Palpi moderate, ascending; second joint moderately thickened, slightly roughened; terminal joint short. Thorax with



a rounded anterior crest. Abdomen with flattened dorsal crests on first and second segments. Posterior tibiae hairy. Forewings with 10 approximated or connate with 8, 9 from areole (rarely short-stalked), 6 usually from areole. Hindwings with 3 and 4 connate or stalked, 6 and 7 sometimes short-stalked, 8 anastomosing with cell at  $\frac{1}{4}$  or  $\frac{1}{3}$ .

In this genus I include *Carea*, Wlk., and *Careades*, B-Bak.; though there is some range of variation, it seems impossible to draw lines of distinction, and the whole forms a natural group.

*elaina*, Swin. *plagioscia*, Turn. *unipunctata*, B-Bak.

#### AITETA PLINTHOPHORA, n. sp.

(πλωθοφορος, marked with brick-red).

♂, 40 mm. Head and thorax ochreous-grey. Palpi fuscous. Antennae fuscous; simple. Abdomen pale grey, towards apex suffused with whitish, tuft ochreous-whitish. Legs reddish-brown; tarsi fuscous. Forewings suboblong, costa arched at base, thence doubly sinuate, apex acute, termen strongly bowed, slightly oblique; pale grey; a tuft of long scales on base of dorsum; an oblique line from  $\frac{2}{5}$  costa to tornus, beyond which disc is suffused with pale ochreous, and contains some fuscous irroration; cilia fuscous. Hindwings with termen rounded towards apex, strongly sinuate towards tornus; pale red; dorsal area pale fuscous; cilia white, on dorsum reddish and very long.

♀, 42 mm. Forewings with costa scarcely sinuate, apex not acute; reddish-ochreous-grey finely irrorated with dark fuscous; two dark-fuscous discal dots before middle placed longitudinally; a subterminal row of dark-fuscous dots, nearly straight, from shortly before apex to tornus; cilia towards tornus white. Hindwings as in male, but termen not so strongly sinuate, dorsum without long reddish cilia.

Allied to *plagioscia*, Turn.

*Hab.*—Northern Queensland: Kuranda, near Cairns, in April and May; two specimens, received from Mr. F. P. Dodd.

#### 7. Gen. ACACHMENA, Turn.

Frons not projecting. Palpi short, obliquely porrect; second joint triangular, thickened with rough scales, forming a large anterior tuft; terminal joint short. Thorax with a rough ridge-like posterior crest. Abdomen with dorsal crests on first and second segments. Posterior tibiae smooth. Forewings normal. Hindwings with 8 anastomosing with cell to  $\frac{1}{3}$ .

*oenocrossa*, Turn.

## 8. Gen. ARIOLA, Wlk.

Frons smooth, not projecting. Palpi rather short, obliquely porrect; second joint triangularly dilated, much expanded at apex, with rough scales above and beneath; terminal joint short. Thorax with a small smooth posterior crest. Abdomen with flattened crests on first and second segments. Posterior tibiae smooth. Forewings normal. Hindwings with 3 and 4 stalked, 8 anastomosing with cell to middle.

*coelisigna*, Wlk.

## 9. Gen. WESTERMANNIA, Hb.

Frons smooth, not projecting. Palpi moderate or rather long, ascending; second joint nearly smooth; terminal joint moderate or rather long. Thorax with a small posterior crest. Abdomen with small flattened crests on first and second segments. Posterior tibiae smooth. Forewings normal. Hindwings with 8 anastomosing with cell to  $\frac{1}{3}$  or to middle.

*argentata*, Butl. *concha*, Butl. *gloriosa*, Hmps. *Hab.*—Northern Queensland: Kuranda, near Cairns, in January; two specimens, bred from larvae on the "Guada" or "snake" bean.

## 10. Gen. LASIOLOPHA, nov. (λασιολοφος, with hairy crests).

Frons not projecting, but with a slight anterior tuft of scales. Palpi long, ascending; second joint thickened with rough scales anteriorly towards apex; terminal joint as long as second. Thorax not crested. Abdomen with small rough dorsal crests on three basal segments. Posterior tibiae smooth. Forewings with areole small and narrow; male retinaculum very large, double, not bar-shaped. Hindwings normal.

Differs from *Paracrama* in the second joint of palpi being dilated with rough scales towards apex, the small anterior frontal tuft, and the hairy abdominal crests; the male retinaculum is highly peculiar.

*saturata*, Wlk.

## 11. Gen. PARACRAMA, Moore.

Frons smooth, not projecting. Palpi long, ascending; second joint scarcely thickened, nearly smooth; terminal joint as long as second. Thorax without crests. Abdomen with flattened dorsal crests on first and second segments. Posterior tibiae smooth. Forewings with areole long and narrow. Hindwings with 3 and 4 connate or short-stalked, 8 anastomosing with cell near base.

With this I include *Maurilia*, Möschl., as there seems to be no structural distinction.

*dulcissima*, Wlk. *iconica*, Wlk. *iocephala*, Turn.

#### 12. Gen. MACEDA, Wlk.

Frons smooth, not projecting. Palpi moderate, ascending; second joint smooth; terminal joint short. Thorax with a small smooth posterior crest. Abdomen with small flattened dorsal crests on first and second segments. Posterior tibiae smooth. Forewings with areole broad. Hindwings with 3 and 4 stalked, 8 anastomosing with cell near base.

*mansueta*, Wlk.

#### 13. Gen. CACYPARIS, Wlk.

Frons smooth, not projecting. Palpi very long, slender, ascending; second joint scarcely thickened, smooth; terminal joint about twice as long as second, very slender, but dilated into a club at apex. Thorax and abdomen not crested. Posterior tibiae smooth. Forewings with a rounded boss of scales on dorsum; neuration normal. Hindwings with 5 from well above lower angle of cell ( $\frac{1}{3}$ ).

*melanolitha*, Turn.

#### 14. Gen. ARMACTICA, Wlk.

Frons not projecting. Palpi moderate or rather long, ascending; second joint but slightly thickened, nearly smooth; terminal joint moderate. Thorax and abdomen without crests. Posterior tibiae hairy on dorsum. Forewings normal. Hindwings with 5 from well above angle ( $\frac{1}{3}$ ), 8 anastomosing with cell to  $\frac{1}{3}$ .

*columbina*, Wlk. *endoleuca*, Hmps. *conchidia*, Butl.

#### 15. Gen. ACONTIA, Ochs.

Frons not projecting, but with anterior tuft of scales. Palpi moderate or long, ascending; second joint slightly roughened; terminal joint short, rather long. Thorax not crested. Abdomen with flattened dorsal crest on basal segment. Posterior tibiae hairy. Forewings without areole, 7 and 8 stalked, 9 and 10 stalked. Hindwings with 5 from well above angle ( $\frac{1}{3}$ ), 8 anastomosing with cell near base.

*emboloscia*, Turn. *transversa*, Gn. *amata*, Wlk. *congenita*, Hmps. *malvae*, Esp. *Hab.*—Queensland: Cairns, Charters Towers, Eidsvold, Brisbane, Rosewood.